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ART. I. — THE CHRIST OF THE JEWS.

GERMAN criticism on the New Testament has been very fruitful of results. Some may take fruitful to be a misprint for barren, or by results may understand bad results. But we mean what we say; that the studies of German critics have been fruitful, and of good results. The impression prevails at large, that these scholars have done little more than annihilate each other, that theory has displaced theory, and interpretation succeeded interpretation, without rule or order, — each hypothesis having its day, and then disappearing to make room for another equally baseless, which in its turn dies, leaving no useful materials for future building. It is the common belief that German Biblical criticism is chaotic. There never was a greater mistake. It is true that hasty generalizations have been made; errors have been committed and rectified; conjectures have proved false. This is the case with every science in its growing up. An extensive generalization taking the form of a theory is made upon a very few facts. Further discoveries cause the gigantic induction to be abandoned, but it only yields place to another equally out of proportion with the new mass of established data. The facts come first, the generalizations afterward. The reverse order seems to

prevail. The theory so vast appears not only to precede, but to choose, and even to create, the facts. We think the philosopher possessed by a preconceived idea. No doubt he is so to some extent. The theory hastily constructed will modify the facts it is built on, perhaps will imagine some others. Still, in the order of thought it follows them, and is shaped after them, until with the coincidence of theory and fact truth is discovered. So it is with Biblical criticism. One generalization after another has to be abandoned as too wide and sweeping, but no data are lost. Eichhorn yields to Paulus, Paulus to Strauss, Strauss to Schwegeler, but all move on in the same line. There have been apparent retrogressions, but the advance has been sure. Notwithstanding diversities of opinion in regard to details, there is a surprising unanimity upon main facts and principles. The great points may be considered as established. The deposits of many students have at last formed a solid foundation. The labors of the last ten years especially have greatly furthered the cause of critical science. The writings of Schwegeler and Baur, of Zeller, Planck, and Schwitzer in the *Theologische Jahrbücher*, are contributions of absolute and permanent value to this literature. There is a large school of critics who pursue a strictly scientific method of inquiry. They take the New Testament for exactly what it is, coming to its perusal with no prepossessions of any kind, traditional or dogmatic. They bring to it the same rules of investigation, literally the same rules, which they would apply to ordinary books. This is no new principle; but their adherence to it is wholly new; and the conclusions they arrive at are owing not to faithlessness, as many suppose, but to a severe obedience unto the method prescribed. Scrutinizing the Gospels with historical keenness, they have thrown much light upon their character and purpose, their age and their authors. By rigid analysis of their contents, many significant things have been discovered; the fine stream of doctrine and argument has been traced through what long appeared a tangled confusion of disconnected words or a bare waste of unsuggestive incidents; nice analogies of thought have been discerned, and the relations which the Gospels bear to each other and to their age have been explained. No longer regarding the New

Testament as a single book, having one general character, pervaded by one and the same idea, and written under a common impulse of thought, but rather considering it as a collection of separate documents, each complete in itself, each characterized by a distinct plan, motive, doctrine, and dogmatic purpose, and representing a particular phase of speculation, the scholars we speak of are enabled to assign with very considerable accuracy the place which these writings should hold in the development of contemporaneous opinion. Such results are exceedingly valuable. They may not all be final; they may not all be true so far as they go. Some things will be unsaid. Some will be modified. We expect this. But what has been acquired is of great value, nevertheless. The ablest of these critics are not so presumptuous as to think that the whole truth is found. With singular candor, and modesty also, be it said, they confess their mistakes. Baur's masterly exposition of the Pauline and Johannine theology may be unsound in some points, but its leading principles are probably fixed once and for ever. Schweigler's idea, that the belief of the Church was slowly developed by the conflict between Paul, the Apostle to the Gentiles, and the twelve who were Apostles to the Jews, — that the books of the New Testament, and in fact all the theological writings of the first century and a half, were of a controversial character, taking different sides in the discussion, or mediating between the two parties, — may need qualification, as having been made too absolute and pressed too far; but substantially it is admitted, and is likely to be confirmed; at least in the opinion of the foremost men. Biblical criticism is an experimental science. You can only say what general positions in it are about settled, not what special truths are demonstrated.

We propose in this article to report some of the conclusions already reached upon a single point, — namely, the doctrine concerning Christ, his nature and functions, in the New Testament. We purpose reporting these conclusions, not objecting to them, nor yet defending them. We confess our inadequacy to either task. For the scholars who give us these results are prodigiously learned, and whoever undertakes to confute or to vindicate them, or in fact to do any thing but sit under them

as a wary, attentive pupil, must possess erudition and sagacity in some measure proportionable to theirs.

Another explanatory remark must be offered here. The conclusions we give are the conclusions of a particular school of critics; by far the ablest and most consistent, but a distinct school. Other critics, learned men of the orthodox persuasion, Dorner, for example, and old Hengstenberg, fight manfully against them, some think successfully. Moreover, individual members of the school differ among themselves, on minor points. We shall not indicate these differences, which are unimportant; but shall confine ourselves to a general exposition of characteristic views. To do even this accurately, according to the sequence of thought, we must begin somewhat far off.

The connection which Judaism held to exist between God and man, this is the basis of our inquiry. It was a distinctive feature of Judaism, — we speak of Judaism, of course, as a whole theological system, not as an historical fact at any one period, — it was peculiar to the genius of Judaism, that it absolutely separated God and Nature. God was not immanent in the world, but a solitary, independent Being; not, however, absorbing into himself all being, for the world had a distinct, though accidental, substance and existence. The material universe, however, is of small account in the Hebrew system. It is man, the finite spirit, who represents the contrast of God; man, who is entirely distinct from God, and yet eternally related to him. Nor is it the whole of mankind, the human in itself, that stands thus over against the Divine, but only a small section of mankind, a single race, the Jewish people. It is this elect nation, made the especial object of the Divine care, which God is incessantly seeking to reconcile with himself. Such a view could not fail to narrow exceedingly the Hebrew idea of God. A limited, almost a human personality, must have been ascribed to him who was not the Infinite and Absolute Deity, but the Guardian of a singular race. The personal will of the Divine is opposed to the personal will of the human, and the only relation between the two is that of merit and reward, never that of true inward harmony. Their mutual dealings are represented by the familiar figure of a lawsuit, in which each

party pleads against the other. The people are the servants of God, not his sons. They approach him by means of a covenant, and please him by obedience to a law. No spiritual intercourse is possible between the finite and the infinite; for the finite cannot break over its bounds. This chasm between God and man, which was peculiar to the Jewish religion, remained impassable until heathen philosophy, blending with Hebrew thought in the school of Alexandria, produced the doctrine of the Logos.

Long before the birth of this doctrine, however, the Jewish mind had been straining after mediation. Hints of the final reconciliation, by no means obscure, abound in the Old Testament writings. A regular progress may be traced in the theophanies, or modes of Divine manifestation, described in these ancient books. Jehovah at first appears to the senses; then he sends a messenger, an angel; afterward he reveals himself in dreams and visions of the night. Finally, his attributes are personified, power, wisdom, goodness, in their order. God communicates with men through his Spirit, which is imparted to kings and prophets; but the Spirit is only a Divine attribute, not a Divine being. God sends forth his Word; he speaks his will, and it is done. By a word he creates heaven and earth. He sends his Word to his chosen prophets. The Mosaic law is the Word of Jehovah. But this Word is no person; nothing more than an impersonation of the living might of the Most High. The descriptions of Wisdom are far bolder. Wisdom is a moral attribute of Deity, directing and qualifying his will. To the Hebrews, the perfection of God was best displayed in Wisdom. This explains why, in the later books of the Old Testament, in Job, Proverbs, and particularly in the Apocrypha, Wisdom is exalted as the first of the Divine attributes. She is described as an absolute principle; man knows her not, nor is she found in the land of the living. God alone is acquainted with her pathway and dwelling-place. She frames and governs the world, and appoints the relations of God to man. She is the eldest daughter of God, anointed by him to be queen and governess of the earth. But this is figurative, poetical language, not too strong for personification. Wisdom is still an attribute, by no means a distinct person from the Deity. Even in the Apocryphal writings, in the Book of

Sirach and the Wisdom of Solomon, the descriptions of Wisdom do not pass the limits of bold imagery. She is not an independent, conscious being, intermediate between God and man. She is a solid, intense beam of light from the Divine glory; never cut off from its source, though seeming to have an individual power of its own.*

The Jewish religion was emphatically the religion of dualism, not of reconciliation. This peculiarity defined the popular conception of Messiah, both as to his nature and his office. He was to be a man, born of mortal parents, and subject to mortal conditions. He was to be a descendant of David, the greatest king. The spirit of God was to be poured out upon him as upon the prophets, only in larger measure. Shortly after his birth, this bounteous gift, comprehending all other gifts, of power, wisdom, and holiness, was to be bestowed upon the Christ. Such was the Messiah's nature, modified circumstantially, though not essentially, by the changing fortunes of the nation, the special exigencies of the times, and the phases of Jewish thought. His function corresponded with it. He was to restore peace to Israel, within and without. He was to build up Zion, and secure to God's people all conceivable blessing.

This is the only conception of Christ that the Hebrews with their faith could entertain, as is abundantly manifest in the Old Testament. It was not until a late period, that the prevailing belief in angels was applied to the Messiah, as we shall see by and by. Long after the age of Jesus, when Oriental speculations had corrupted the severe simplicity of Jewish thought, Christians, and Hebrew Christians, taught that he was an archangel; but such a conception was entirely foreign to the genius of the ancient faith, and never obtained influence in the Church. The Christ of Judaism was an anointed man, after the model of the old kings and prophets of history; greater than they were in stature, but not intrinsically more divine.

Now the first Christians were Jews. Primitive Christianity was a belief in the Messiahship of Jesus; a belief that Jesus of Nazareth was the Christ. This point is very prominent in the Gospel histories. After the death

* See Baur's *Dreieinigkeit*, Vol. I. pp. 46-59.

of Jesus, the disciples were greatly exercised with the problem of reconciling his suffering and death with his Messianic claims. In the Acts of the Apostles, the proclamation of the Messiah's coming and resurrection seems to have been the burden of Apostolic preaching. This book labors also to represent Paul as a legally righteous Jew. He is persuaded by James to make a public profession of his faith in the Hebrew rites, and to this end he takes upon him the Nazarite's vow, thus convincing the people that those things whereof they had heard concerning him, namely, that he denied the utility of circumcision and the binding obligation of other Jewish ordinances, were untrue. (Acts xxi. 20-26.) Hegesippus, describing in glowing words the activity of James, calls him "a true witness both to Jews and Greeks that Jesus is the Christ." Christianity was a heresy among the Jews; as such it is described in the Acts (xxiv. 5; xxviii. 22). In no point of doctrine did it overstep the limits or break through the lines of Judaism. The idea of a Messiah had long been familiar to the Hebrew theology, had even been cast into a peculiar mould. All Jews accepted the doctrine of the Christ. Some contended that he had not appeared, and looked for him in the future. Others were assured that Jesus of Nazareth was he. This was the whole controversy between the Jew and the Christian. The Christians regarded themselves as the only orthodox Jews, and were regarded by their opponents as schismatics. A great deal of evidence might be accumulated upon this point, did not our limits forbid. It is an historical fact, that the Jewish Christians of Palestine continued in close connection with the Hebrew synagogue, even later than the time of the Apostles. Josephus never speaks of the Christians as if they were sundered from the Jewish communion. Sulpicius Severus tells us, that up to the time of Hadrian the Christian bishops were circumcised. All the productions of the earliest Christian period not merely recognize, but insist, that Christianity was only the genuine Judaism. Hegesippus calls the Christians the "tribe of Judah." The letter of James addresses them as the "twelve tribes who are scattered abroad." The Clementine Homilies are full of this idea. The Clementine Recognitions assert, "The Jews were in error concerning the first coming of

the Lord, and that is the sole quarrel between them and us." In one passage of this work, Peter has these words put into his mouth: "The sole controversy which we who believe in Jesus have with the unbelieving Jews is this, — whether Jesus be that prophet whom Moses foretold should come." Tertullian says: "The Jews even now expect the advent of Christ; nor is there any other disagreement between us and them, than their unwillingness to believe that he has already come." But we have no space to multiply testimony.* Regarding it as established that the Christians were simply Jews, who believed as an historical fact that the Messiah had come, it follows that their Messiah was no other than the Jewish Messiah, answering the common expectation, and similar in all respects to the Old Testament prophets. But before we proceed to verify this position, another point of great historical importance must be noticed.

These original Jewish Christians were called Ebionites. Much has been written about the Ebionites. The later fathers of the Church discarded them as heretics, but there is abundant proof of their having been the orthodox Christians of an earlier day, the true primitive believers. To state the grounds for this opinion would carry us too far aside from our direct way. We content ourselves with referring to copious authorities. †

This identity of the Christians with the Ebionites is a fact of greatest moment. It furnishes the historical basis for our inquiry into the earliest views respecting the nature and function of Christ. We know what the Ebionites believed. The following is a passage from Eusebius, who is giving an account of Origen's Tetrapla and the translations of Symmachus. Moreover, it ought to be observed that Symmachus was an Ebionite. "These Ebionites are such as say Christ was born of Joseph and Mary, and suppose him to have been a mere man; and contend that the law ought to be kept after the manner of the Jews, as we have before shown." ‡ Again, Eusebius says: "Some, who are not to be moved by any

* For other evidence see Schwegler, *Das nachapostolische Zeitalter*, Vol. I. p. 91, et seq.

† See Schwegler, Vol. I. p. 22, et seq., 104, et seq.; Baur, *Tüb. Zeitschrift*, 1836, III. p. 128; Planck, *Das Princip d. Ebionitismus*, Theol. Jahrb. 1843, 1.

‡ *Eccles. Hist.*, Lib. VI. cap. 17.

means from their respect for the Christ of God, are in some things very infirm. They are called by the ancients Ebionites, because they have but a low opinion of Christ, thinking him to be a mere man, born of Joseph and Mary, honored for his advancement in virtue." Athanasius writes, that "the Jews at that time (meaning at the time of Christ) being in an error, and thinking that the expected Messiah would be a mere man, of the seed of David, for that reason the blessed Apostles in great wisdom first instructed the Jews in the things concerning our Saviour's humanity."* Such was the belief of the earliest Ebionites respecting Christ. So thought the Nazarenes likewise; honoring him as a just man, and even maintaining that his sinlessness commenced at the time of his baptism. It is not concealed that many of the later Nazarenes and Ebionites held a different view of Jesus. Origen tells us, that some of the Ebionites believed Jesus to have been born of a virgin. Jerome asserts the same of the Nazarenes. This doctrine might have prevailed when these fathers wrote; but the intimate connection of the two sects with Judaism, and the character of the doctrine itself, forbid our taking it for the original creed. It was early, but not first. Later still, when the primitive Hebraism had been corrupted, Jewish Christians taught that Christ was an archangel; but the fact would not justify us in asserting that this was the faith of Jewish Christians. The simplest belief is the earliest. The nature of Christ would be exalted only when his function was magnified. We are forced to say, therefore, that the first Christians regarded their Messiah as a mere man, born of common parents, endowed with a human nature, and afterwards filled with the Holy Spirit of God.

So far as we may learn from notices few and scanty, this was the doctrine of the ancient "Gospel according to the Hebrews"; a Gospel which, as its title imports, was a production of Jewish thought, and probably the oldest Christian document. Schweigler says, "Not one of the later Gospels can produce in its favor so long and continuous a line of witnesses."† "The supposition that the 'Gospel according to the Hebrews' was

* See Lardner, X. 103.

† Vol. I. p. 203.

an apocryphal book is wholly without foundation." This production was exclusively used by the Ebionite Christians till the middle of the second century, after which period it fell into disrepute, as containing the opinions of heretics. While it flourished, we have no certain proof that any other Gospels existed;* on their appearance, it slowly retired from view. The advance of speculation left it behind to perish. Its virtue passed into our canonical Scriptures. Epiphanius tells us that this primitive Gospel commenced with the appearance of John the Baptist, omitting the genealogies and the accounts of Christ's infancy. Jerome cites a passage from the book, as follows: "It happened when the Lord came up from the water, the whole fountain of the Holy Spirit descended and alighted upon him, and said to him, My Son, in all the prophets I have been expecting thy coming that I might rest upon thee." Epiphanius quotes the same Gospel in different language, and adds, "There was a voice from heaven which said, 'Thou art my beloved Son, *this day have I begotten thee.*'" The two accounts do not wholly coincide. It is probable that the document underwent many changes, and that Epiphanius gets his account of the baptism from a later recension. Both, however, are thoroughly Jewish in their character; both suppose Jesus to have been inspired at his baptism; Epiphanius expressing this even more strongly than Jerome. Notwithstanding the inconsistencies of Epiphanius himself, in speaking of the Ebionite Gospel, and the obvious discrepancies between him and other fathers, its character is clearly defined by negative, if not by positive marks. It may or may not have contained incidents from the childhood of Jesus; it does not appear to have contained any thing inconsistent with the Jewish conception of Messiah. There is no evidence that it mentioned at all the miraculous birth of Christ, who in one passage is represented as saying, "I am he of whom Moses prophesied, saying, 'A prophet will the Lord your God raise up to you from your brethren, like unto me.'"

We come now to our canonical Gospels. The Gospel of Matthew has close affinities with that of the He-

* Schwegler, Vol. I. pp. 214, 263.

brews, having grown out of it, as some think.* However that may be, its dogmatic import is very similar. Thus far we have seen that the nature of Christ has been treated in a manner wholly Jewish. He is a mere man, subject to all the conditions of a created being, and distinguished from other mortals only by the spiritual preparation for his Messianic office which was given him at his baptism, the supply without measure of the Holy Spirit. Now this is the doctrine that characterizes Matthew's Gospel. The writer usually applies to Jesus the title, "Son of David." He is anxious to note every fulfilment of an Old Testament prophecy, not seldom wresting the Scripture to his purpose. Through the entire Gospel, great stress is laid upon the historical proof that Jesus is the Christ. These are significant facts. The prominence given to the genealogy, which argues that Christ was of mortal birth, and to the baptism, which implies that the Holy Spirit was his by special gift, not by inherent right, is a very obvious feature. Other things almost too plain to mention are the birth in Bethlehem, the flight into Egypt, parallel with Moses's return thither, at all events introduced out of regard to an old saying, the temptation, and the transfiguration, which is peculiarly Jewish. Christ's emphatic assertion that John was Elias, his precursor, and Peter's solemn confession, "Thou art the Christ, the Son of the living God," with Jesus's response to it, will occur, to a casual reader, as indications of a like kind. The mode of Christ's entry into Jerusalem, the shouts of the populace, and the answer made to the high-priest's adjuration, also bear testimony to the same doctrine. The Christ of Matthew is subject to natural necessities, to inward conflict and sorrow, and to distress of soul. He is mortal in the strictest sense. His Jewish nature and function are early expressed in Matt. i. 21, where the name "Jesus" is formally given to him by an angel, and it is declared that he is "to save his people from their sins."

In fact, the Hebrew conception of Christ characterizes the first Gospel. The writer, however, inserts passages which imply the existence of a higher doctrine. The most remarkable of these is the account of the Christ's

* Schweigler, Vol. I. p. 231, et seq.

miraculous birth, which is entirely inconsistent with the genealogy and the baptism, the first plainly asserting his human origin, the second suggesting it by the circumstance that he was not inspired until he was thirty years old. The miraculous birth does not of necessity imply a preëxistence, though it does a superhuman nature. Christ forgives sins. But this may not have transcended the powers of Messiah.* The phrase, "Son of God," which Dorner lays great stress upon, is only a Messianic title. Other attributes ascribed to Jesus by Matthew seem pointedly inconsistent with the Hebrew doctrine, but they may not be. Such are his power of imparting miraculous gifts; the declaration that, where two or three are gathered together in his name, he is in the midst of them; the superiority of the Messiah to David; his continual presence with his disciples.† No matured theory can be inferred from the writer's indefinite language. We cannot say that he ascribes to Jesus a superhuman essence, though he evidently attaches some quality to him which is above the ordinary attributes of Messiah. Even the passage (xxviii. 18) wherein Christ claims for himself all power in heaven and in earth, is not decisive of any thing beyond a human nature. But there is one text about which there can be very little doubt. It is Matt xi. 27: "All things are delivered unto me of my Father; and no man knoweth the Son, but the Father; neither knoweth any man the Father save the Son, and he to whomsoever the Son will reveal him." This verse stands entirely alone, not only disconnected with the rest of the Gospel, but foreign to its spirit. Possibly the Ebionite Christ might have spoken such words in a moment of exaltation and rapture; but the language is too obviously dogmatical for that. It is not probable that such phraseology has a merely ethical significance. It is more than doubtful whether it conveys so little as the broadest claim to Messianic dignity. The passage seems to belong to a different class of speculations from the Jewish, and contains a metaphysical conception of Christ which a Jew could hardly have entertained at that early period.

* See 2 Samuel xii. 13; Isaiah vi. 5-7; Zech. iii. 4; Wetstein *in loc.* Matt. ix. 6.

† See Wetstein in Matt. xviii. 20; xxviii. 18-20; and Kuinoel.

Speculation upon the nature of Jesus was of rapid growth. It was so by the exigency of the case. The character of Jesus himself was too great for confinement within the limits of common Jewish thought. He transcended the vulgar conception of Messiah. And not only that, he violated it palpably in his death. The Jew thought that the Christ would live for ever. But Jesus is nailed to the cross. His claim to be the Christ has no validity, then, unless the conception of the Christ can be enlarged. Death itself must be regarded as a step toward his exaltation. This involved a more intimate connection with the Deity than was familiar to the Hebrew mind; it also rendered necessary an enlargement of his authority, an extension of his sphere. This process must have commenced soon after the death of Jesus, and gone forward unequally according to prevailing tendencies of thought. Matthew's Gospel, written for Jews, and from the Jewish theory, contains, as we have seen, only one or two traces of the new ideas. Making no account now of passages whose meaning is doubtful, the writer adds to the primitive Ebionite belief the doctrine that Jesus was born of a virgin. This is his contribution to the thought of his age.

The Gospel of Luke contains a doctrine substantially the same with Matthew's. The field of Christ's activity is more extended. He is the Christ of the Gentiles as well as of the Jews; but he is the same Jewish Messiah still. In the first two chapters of Luke, we find nothing but the Christ of old Hebrew prophecy. There is a genealogy constructed for the Gentiles, which traces the lineage of Jesus, not to Abraham, the father of the Hebrews, but to Adam, the parent of all mankind, nay, to God, whose offspring all nations are. The Spirit descends at the baptism, though Luke too inserts the miraculous birth in curious contradiction to his prevailing doctrine. Christ is tempted, is transfigured, and the Holy Spirit that inspires him is distinctly separated from himself. He is expressly called a prophet. One of the most complete statements of the Ebionite creed anywhere to be found occurs in Luke xxiv. 19: "Jesus of Nazareth, which was a prophet mighty in deed and word before God and all the people." The following verses, also, including the 27th, which tells how Christ, "beginning at

Moses and all the prophets, expounded in all the Scriptures the things concerning himself," are very suggestive, and seem to be the burden of the whole Gospel. Luke adds nothing to the Christology of Matthew. He has in common with him those shadowy passages which dimly hint at higher views of Christ's nature; but on the whole, the impression is more consistently and thoroughly Jewish. Especially is this the case at the commencement and close of the book, where we should expect to find the strongest assertions of a dogmatical character.

The Gospel of Mark contains little that is singular. It seems to be the purpose of the writer to avoid being peculiar, to shun positiveness. Throughout the work he betrays an anxiety to harmonize the discordant opinions that were prevailing among the Christians. But the general tone of the Gospel is Ebionitic, slightly colored by speculations of a different kind. Mark says nothing of an immaculate conception, and omits the genealogy; he makes no mention of the birth or the youth of Christ. In the very first verse he writes, "Jesus Christ, the Son of God," as if to exclude all theories about him, or it may be to indicate something mysterious in his descent. But that is not very evident. There are one or two rather dark intimations that the writer of the second Gospel received the supernatural birth of Jesus. His father is never alluded to. In chap. iii. 31, his brothers and mother are spoken of together; and in chap. vi. 3, where the corresponding passage of Matthew reads, "Is not this the carpenter's son? Is not his mother named Mary?" Mark has it, "Is not this the carpenter, the son of Mary?" But no great stress can be laid upon such doubtful expressions. De Wette finds traces of Docetism in the account of the passion. The inference of the centurion that Jesus was the son of a god, from the fact "that he so cried and gave up the ghost," and the astonishment of Pilate on hearing that he was so soon dead, are thought to exhibit the same tendency. But it is very uncertain. Such allusions would hardly attract our notice but for a saying of Irenæus, that "they who separate Jesus from the Christ, and assert that the impassible Christ was unaffected (*perseverasse*), but that Jesus suffered, prefer the Gospel which is according to Mark." The Christ of the second Gospel is the Jewish

Messiah, though faintly sketched. The strong Hebrew traits of Matthew's Christ are almost obliterated. He is baptized; is once called the Son of David, but by a blind man; is confessed by Peter to be the Christ; and is hailed as such by the people, who cry, "Blessed is he that cometh in the name of the Lord. Blessed be the kingdom of our father David, which cometh in the name of the Lord." These incidents present to us the shadowy form of the old Jewish Christ, as it is changing almost imperceptibly into another shape. He is losing his identity, but still is no other than himself, though not wholly himself. The human outline is yet distinct, though its edges are slightly blurred and hazy, as if the figure were softening, melting into the angelic.

With the Gospel of Mark one phase of belief is closed. The primitive faith of the Christians about Jesus, the faith so clearly expressed in the book of Acts: "Jesus of Nazareth, a man approved of God by miracles and signs";—"Jesus whom God made to be lord and Christ";—"Jesus, the holy child of God, whom he anointed";—"Jesus of Nazareth, whom God anointed with the Holy Spirit and with power, who went about doing good and healing all who were oppressed by the devil";—"Jesus, whom God raised up from the seed of David, according to his promise, to be a Saviour unto Israel";—this original faith of the Jews is becoming corrupt. Already, in Matthew, Luke, and Mark, inconsistent elements are mingled with it; and time increases their proportion.

The Epistle of James, in other respects one of the most curious and significant productions of the early Christian times, contains no peculiar theory concerning Christ. There is nothing that requires notice in the letter of Jude. But the Apocalypse and the First Epistle of Peter demand especial attention. Their doctrine is one step in advance of that of the first three Gospels. The writer of the Petrine Epistle dwells chiefly upon the function of Christ, leaving his nature to be inferred therefrom. Believers are sprinkled with the blood of Jesus Christ (i. 2). The spirit of Christ was in the ancient prophets, testifying beforehand his sufferings and glory (i. 11). Christ was foreordained before the foundation of the world; and by his precious blood the Christians are re-

deemed from the foolish course of life received by tradition from their fathers (i. 18, 19). "His own self also bare our sins in his own body on the tree" (ii. 24). "He died, the just for the unjust, that he might bring us to God" (iii. 18). After his crucifixion, he went and preached to the departed spirits who had been disobedient and unbelieving in the time of Noah. "He is gone to heaven and is on the right hand of God; angels and authorities and powers being made subject to him" (iii. 19-22).

It is impossible to say precisely what these passages mean. Probably the writer himself attached no very exact meaning to them, and had framed in his mind nothing like a metaphysical notion of Christ corresponding to them. His expressions exhibit no matured theory; but their general tone is wholly foreign to the character of the Gospels of Matthew, Mark, and Luke, and argues at least the commencement of a new order of ideas.

The Apocalypse, like the First Epistle of Peter, is rather suggestive of higher speculations than demonstrative of them. The book, in every point of its dogmatics, is thoroughly impregnated with the spirit of Judaism. We have the wrathful national God, the frightful judgment, the exaltation of the morally righteous, the judicial form of retribution, and the high rank assigned to the prophets. We have, too, a Messiah who is a man of war, riding through seas of blood, with eyes as a flame of fire; he rules the nations with a rod of iron; he treads "the winepress of the fierceness and wrath of Almighty God." Christianity is identified with Judaism; the faithful are all Jews; the one hundred and forty-four thousand who are sealed are of the tribes of the children of Israel. The "temple of God" survives the desolation of Jerusalem, being secured miraculously from destruction. The Jews only stand upon Zion, next the throne of God; they alone learn the new song. None but the chosen Jews dwell in the heavenly Jerusalem, the approach to which is by twelve gates. These twelve gates are the twelve Apostles; and it is a striking evidence of the intensely Jewish character of the Apocalypse, that Paul, the Apostle to the Gentiles, is thus passed by in silence, if not absolutely excluded. Nay, it is by no means certain that he is not ranked among false teachers.* With this

* Apoc. ii. 2. See Schweidler, Vol. I. p. 172.

Hebrew cast of thought, we should expect to find the Hebrew type of Messiah in all its purity. But in this we are disappointed. The Christ of the Apocalypse transcends the common Jewish idea. There are three remarkable points in the Christology of this book. Christ is called "the beginning of the creation of God" (iii. 14). The attributes and the name of Jehovah are applied to him repeatedly (i. 17; xxii. 13; ii. 8). And in one passage, the title "Word of God" (ὁ λόγος τοῦ Θεοῦ) is bestowed upon him (xix. 13). The dignity implied in these predicates is not of necessity so great as it would at first seem to be. The expressions have an Apocalyptic indistinctness. It is not certain even that they bear a dogmatical significance. The phrase, "beginning of the creation of God," is of very doubtful import. It seems to mean that Christ was the first created being, if not the creative principle itself. But such a thought would be strange in a book which nowhere else ascribes personal preëxistence to the Messiah. The language may refer to the "new name" of verse 12, in which case an interpretation would be easy. The name of the Messiah, according to the Rabbins, was one of the seven things created before the world. Ten things were likewise created with the world: among which were the rainbow, the Worm Schamir, and the muzzle of Balaam's ass. Preëxistence, then, in the Talmud being an attribute of all possible things, implied no essential dignity, but was a mere title of honor. Such may be the sense here. More probably, however, the text obscurely intimates an inherent loftiness of rank in Christ. It designates him not as the original of created things, nor as the first-born of created things, but as the chief or top of the universe; the being in reference to whom the world was made. Such a view accords better with the writer's purpose, which is rather to impress the imagination by bold figures than to convey doctrines to the mind by the narrow way of metaphysics. His ideas are nebulous. The more dazzling his images, the less substantial are they. We are confirmed in the opinion, that the language we have been noticing is not to be construed according to severe dogmatical rules, by the character of the other titles applied to Christ. In chap. xxii. 13, he is called "Alpha and Omega, the beginning and the end, the first and the last."

De Wette thinks that, according to the parallelism with chap. xxi. 5 and chap. i. 8, and the phrase "his commandments," verse 14, these words are only a repetition of what God has been saying, delivered by the mouth of Christ, or inserted by the writer, and are not to be considered as descriptive of the person of Jesus. The fact, that Jesus is introduced in verse 16 speaking in his own name, seems rather to favor this explanation. But allowing the force of what De Wette says, the same attributes are plainly ascribed to Christ in another passage, chap. i. 17. Also in ii. 8, wherein Jesus is called "the first and the last." "Alpha and Omega," "beginning and end," "first and last," are equivalent expressions. According to Isaiah (xliv. 6; xlviii. 12) the phrase "first and last" is descriptive of Jehovah. It is, of course, impossible that the writer of a book like the Apocalypse should have ascribed to Christ the nature of Jehovah. Such a thought would have been utterly abhorrent to him. His mind could not have comprehended it. Indeed, the strongest epithet he has forborne to apply to Jesus. He has not described him as the being "who is, who was, and who is to come," as he describes Jehovah in chap. i. 8. But if the words he uses are not to be taken in their exact and wonted sense, they can be understood in none but a figurative or mystical sense. The exalted title of Jehovah is doubtless signified by the "new name" "which none but the receiver knows," which was written upon the Messiah. The one hundred and forty-four thousand have the Father's name written upon their foreheads. Upon the elect are inscribed the name of God, and the name of the city of God, the New Jerusalem, and the Messiah's new name. This remarkable association of three subjects with the unutterable name of Jehovah, which is obviously to be understood in each case, is suggestive. An old rabbinical tradition says, that three things are called by the name of God; to wit, righteous men, the Messiah, and Jerusalem: the righteous from Isa. xliii. 7; Messiah from Jerem. xxiii. 6; and Jerusalem from Ezek. xlviii. 35. It is not at all improbable that the Apocalyptic writer, familiar as he doubtless would be with the fanciful legends of the Talmud, should avail himself of this tradition; and the singular association of names in chap. iii. 12 makes it almost certain

that he has done so. Christ, therefore, according to this interpretation, bears the *name* of Jehovah, and not his nature. Still the question remains, what conception could the writer have formed of Christ? No old-fashioned Jew, thinking soberly, would have applied such epithets to the Messiah. Neither of the first three Evangelists would dream of speaking about their Jesus of Nazareth in such language as John uses in the Apocalypse. The Christ must have been above the ordinary Jewish type to bear such honors. Probably the expressions we have been commenting upon are equivalent to those first explained. "The first and the last" conveys about the same meaning as "the beginning of the creation of God." It indicates the same kind and degree of dignity. No doubt its whole significance would be exhausted by calling Jesus in some indefinite, poetical way, the climax or top of creation.

In chap. xix. 13, another title is given to Christ. He is called "the Word of God." That this is but another form of the "new name" which figures so conspicuously, is apparent from the preceding verse. In the Targums, the phrase is very commonly used for the name of Jehovah. We may, therefore, give the same explanation to this passage which we gave to the last. The name of Jehovah is applied to the Messiah. De Wette thinks that the writer, by calling Christ "the Word of God," means to designate him as the bearer of the Word, the perfect expression of the Divine truth and will. It matters little which interpretation we accept. One thing is clear; this "Word of God" has no affinity with the Logos of the fourth Gospel. The phrase itself reminds us much more of Chaldaean than of Grecian thought. The fourth Evangelist and Philo speak of the Logos as of a person, without any qualifying epithet. But the genuine Hebrew would consider the "Word" only as an attribute of God, and would speak of it accordingly.

We conclude, then, that the Apocalypse does not ascribe to the Messiah a conscious preëxistence. It surrounds him with a haze of glory. It magnifies him not so much to the theological vision as to the warm imagination of the believer. It assigns to him a certain superhuman or angelic nature, which, however, is too indistinct for dogmatical purposes. Superhuman it clearly is.

Little is said in the Apocalypse about the office of Christ. The character of his mediatorial function is not specified at all. He has washed Christians from their sins in his own blood (i. 5). He has redeemed men to God by his blood, out of every kindred and tongue and people and nation (v. 9). He is King of kings and Lord of lords. But the dead, small and great, stand before God to be judged (xx. 12), not before Christ.

To understand the Christ of the Revelations, we must bear in mind that the writer's conception is not the result of his pure speculative thinking, but an inference rather from his practical views. Through his eager expectation of the second advent, he contemplates the Messiah. This accounts for the indistinctness of his idea. Logic engraves its figures in sharp, cold outline; hope and ardent longing embody themselves in shapes vast and dim, but glowing with rich, warm coloring. In the general tenor of the book, which is occupied chiefly with allegorical descriptions, Jesus appears simply as the Jewish Christ. In one passage of pure imagination he is called "the lion of the tribe of Judah, the root of David." At the beginning and close of the book, where ecstasy has the field to herself, the more exalted character is assigned him. It might almost be said that there are two separate Christs in the Apocalypse. And so there would be, did we regard the author as a theologian. But he is none. He is no abstract thinker. There is no Gentile philosophy in him. He is an enthusiastic Jew. It is a Jew's imagination, a Jew's burning hope, that creates this Christ.

The prominent feature of the Apocalypse is its Chiliasm. The whole purpose of the book is to comfort the Christians under persecution. In their bloody and fiery trial they are exhorted to sustain themselves by the faith that Christ will soon appear to receive and bless his own. The kingdoms of the earth are to pass away. The greatness of the world is to perish. The New Jerusalem will speedily descend from the clouds, and the reign of gladness and peace will begin. Of course he who, under God, is the grand mover in this mighty work, must be adequate to his office. He who is to abolish an effete Judaism, and to hurl down to ruin a regal Paganism, can be no less than "King of kings, and Lord of lords,"

—“the Prince of the kings of the earth.” He who commences and completes the destruction of the majestic empires of the world can be nothing inferior to the “chief of the whole creation of God,” — “the first and the last.” He whose Gospel appoints the doom of myriads, — who can he be, but the impersonated “Word of God”? His name must be above every name.

To sum up now the results of our inquiry. We have discovered four Christologies, or forms of doctrine concerning Christ, in the writings we have noticed.

1. The primitive Jewish form, which teaches that Christ is the Messiah; — the son of David foretold by the prophets, born of human parents, raised up and inspired to be the redeemer of Israel. He is called Jesus of Nazareth. His nature is purely a human nature.

2. The form exhibited in Matthew and Luke; which is substantially the same as the foregoing, with two or three additions. Christ is born of a single human parent, being the son of Mary and the Holy Spirit; he is transfigured; is raised from the dead; and is to come again with might and glory. He imparts miraculous gifts; is present with his Church; follows his disciples to the end of the world; and is intrusted with all power in heaven and earth.

3. The form contained in the second Gospel. This is distinguished by its want of peculiarity. It is neither specifically Jewish nor Gentile. It seems to mark a transition period. This indistinctness would alone entitle it to be considered by itself, even if the dim intimations of a Docetic tendency, and the remark of Irenæus before quoted, will not justify us in regarding it as a separate type.

4. The decidedly novel form in the First Epistle of Peter, and the Apocalypse. In these books Christ is the chief of the creation of God, — the first-born of the dead; he is called by the name of Jehovah; he was preordained before the foundation of the world; his spirit existed in the Old Testament prophets; he redeems men by his blood; bears their sins in his own body on the cross; dies, the just for the unjust; preaches in hell to the departed spirits; is exalted at the right hand of God, above angels, authorities, and powers.

The critics whose opinions we are unfolding take

especial pains to say that these diverse Christologies are by no means to be regarded as different aspects of the same historical person. It is not one identical character who is thus presented in several lights, according to the spectator's temperament and level of vision. Each writer describes a personage of his own; a distinct ideal man; peculiar in his origin, his nature, and his function. The original Christians would object to the Christ of Matthew; the Christ of Matthew would not satisfy Mark; the Christ of Mark would be too unsubstantial for Peter; — the difference of view depending not upon the writer's posture toward Christ, but upon the figure of Christ himself, as viewed from the speculations of one or another age.

But how shall we account for such remarkable phases of doctrine concerning the Christ? Whence came the impulse which drove the Jewish thought through such transformations? It came from two sources; one inward and one outward. It came first from the actual character and life of Jesus.* If these transcended the common Hebrew ideal of the Christ, if his interior qualities were finer, broader, deeper, more spiritual, than the Jews understood, such a fact must have materially affected the speculations about him. He could not long have been regarded merely as the Jewish Messiah. He would soon be invested with superior attributes. Men would not be content with saying that the Spirit descended upon him at his baptism; they would rather have it woven into the texture of his being and connected with his very origin. They would call him by more exalted names; would surround him in their thoughts with an atmosphere of mysterious grandeur; would see something superhuman in his destiny, something supersensual in his relation to mankind. Framing a theory of him and his mission to accord with the impression he produced upon their minds, they would fill up many a blank in his history with hypotheses, and inferences that passed with them for facts. It is exceedingly difficult, indeed it is wholly impossible, to say what influence of this kind the actual character of Jesus exerted upon after-speculation;

* On this point, see a dissertation by Dr. Planck, entitled "*Judenthum und Urchristenthum*," in the *Theol. Jahrbücher*, 1847, Nos. 2, 3, and 4.

for all we know of that character is found in the writings which contain the speculation also. We have no narrative of the bare historical facts concerning Jesus. The several biographers record different incidents, which awaken different trains of thought, and suggest different views of Christ, even if they were not brought together in accordance with such views at first. But notwithstanding this difficulty, it is easy to conceive in general how the spiritual life of Jesus should have been instrumental in enlarging men's ideas of his nature and destiny.

Again, the Jewish mind had been softened and beguiled of its old, unbending stiffness by graceful speculations from the East. The impassable gulf between the finite and the infinite had been filled up with angelic beings. Hosts of angels, rank above rank, in endless gradation, reached all the way from man to God. This belief in intermediate spirits, as it became more and more familiar to the Jew, could not fail to connect itself with his Messianic hope. He would have no scruple about attaching some angelic attributes to the Christ, thus blending strangely the human and the superhuman in his nature. There can be no doubt that this was actually done. For the Jews were no metaphysicians, and were not exact in discriminating philosophically between the congruous and the incongruous elements of a spiritual being.

But the impulse to speculation upon the nature of Christ came chiefly from without. The outward circumstances of the Church developed the ideal conception of the Church's founder. While Christianity was mere Judaism, and the office of the Christ was simply the restoration of the Jews, a purely national and exclusive work, he needed no higher faculties or endowments than belonged to the popular Messiah. He might be intrinsically no greater than David or Samuel or Moses, and yet accomplish the mission whereunto he was sent. But when the sphere of Christianity was widened, so as to include the Gentile as well as the Jew, and the influence of Christ, no longer national, was extended to the pagan nations also, it became necessary to exalt his character in proportion to the breadth of his dominion. The greatness of the king must be commensurate with the greatness of his kingdom. Jesus must be placed at

an elevation sufficiently high to command the entire circumference of his sway. Moreover, the essential character of the Christ's errand was changed by the admittance of the heathen world into his empire. As Messiah of the Jews, he had a civil and political, as well as a religious, work to do. He was to restore that people at once to their national supremacy, and to their original posture of faith and acceptance. As Messiah of the Gentiles, his task must have been very different in all respects from this. But as the Christ both of the Jews and of the Gentiles, it became necessary that his office should touch something which all these people had in common; his Messianic power must have been directed to a point which was peculiar to neither, which was the same in both. This could not be political or social restoration; nor could it be the fulfilment of theocratic promises and privileges; it must be spiritual regeneration, redemption from sin, the saving of that immortal principle which was the same thing in all mankind, the common possession of Jew and Gentile, barbarian, Scythian, bond and free. But if this were the Messiah's office, if he were sent to bring all men back to God by delivering them from evil, his nature must be made to correspond with his function. And this explains the fact that Jesus is invested with certain peculiar attributes, or that a new significance is attached to his common Messianic attributes as the Redeemer of mankind. More stress is laid upon the spiritual side of his being; speculation turns upon the interior structure of his soul; his nature partakes of the angelic, and an efficacy altogether incomprehensible and miraculous is attached to his death.

Finally, the expectation of a second coming of Christ, an expectation early prevalent, and fostered by the many and sharp trials that afflicted the young Church, contributed greatly to his speculative elevation. Christians were persuaded that this second advent was close at hand. Stupendous events were on the eve of fulfilment. In a short time the empire of Satan was to be destroyed; of course, the agent in so mighty a work must be mighty, and the Christ of the Apocalypse is born naturally out of the heated imaginations and frenzied hopes of persecuted and outcast men. We are not, therefore, surprised at the various Christologies we have found even in these

few books of the New Testament. The external circumstances of Christendom — if we may speak of a Christendom as existing in the first century — forbade that Christ should be stationary in men's thoughts. That the field of his operations was gradually enlarged from the narrow borders of Judea to the wide boundaries of the world, from the political affairs of an insignificant state to the spiritual interests of all human souls, is an established historical fact, apparent in the Gospels, and described in the Acts. We should expect his own nature to expand in like degree. We should look to see the Jewish Messiah growing in men's thoughts to be "Prince of all the kings of the earth," and the plain Jesus of Nazareth rising to a super-earthly dignity as "chief of all the creation of God."

O. B. F.

ART. II. — SELF-CULTURE OF WOMEN.*

FEW subjects have attracted more attention of late than the question of woman's true social position. But much of the discussion has been conducted in a manner to exasperate prejudice and bring ridicule on those engaged in it. For while a great deal has been said of her natural and inalienable rights, little has been said of her duties and obligations; and still less, we fear, has been said, or even thought, of those means of self-culture by the improvement of which the mere question of social position becomes of small importance. Yet it is only by candid and dispassionate argument that whatever is wrong or injurious in her present relations can be rectified. Conventions and mass-meetings and resolutions, and the various apparatus of party warfare, will effect no good result, even if they do not alienate those who feel a deep interest in the subject, but distrust all extravagant action and inflammatory appeals. That the social

* *Thoughts on Self-Culture, addressed to Women.* By MARIA G. GREY, and her Sister, EMILY SHIRREFF, Authors of "Passion and Principle," and "Letters from Spain and Barbary." Boston: Wm. Crosby and H. P. Nichols. 1851. 12mo. pp. xv. and 464.

position now occupied by a large portion of the female sex is the best suited for the development of their faculties, or for the exercise of a healthy influence on their part, will hardly be claimed by any one. Nor will it be denied by any unprejudiced person, that woman is entitled, within some limitations, to the most thorough and comprehensive education that her intellect will admit, and to a liberal remuneration for her labor in every department in which she can work to advantage, if she chooses to remain single, or to some further legislative provision for the security of her private property, if she marries. On the other hand, none but ultraists and fanatics will maintain that the sexes are so constituted that they can occupy precisely the same fields of moral and intellectual action, any more than they can engage in the same branches of physical exertion. No one who truly honors the female sex, and whose opinion is worth any thing, will desire to see any woman enlisted in the fierce and angry strife of politics, or bending under the weight of cares designed only for the sterner sex. It is gratifying, therefore, to receive a carefully considered work, like that now before us, which aims at elevating the intellectual and moral condition of the female sex without indulging in vague declamation about the tyranny of men, or in devising impracticable schemes for the "emancipation of woman." Certainly, it is far better to elevate her present condition than to attempt any radical change, that could hardly fail to take her out of her true sphere and place her in a position which it should seem she was never intended to occupy. The writers before us understand this; and in their work they have confined themselves to a view of the subject which must commend it to every calm and thoughtful person.

In a brief but judicious Preface they very frankly state that

"They remembered the time when they themselves stood as young girls on the threshold of life; — their childhood, with its so-called education, behind them, — the untried future before. They remembered the painful sense of inconsistency between life as it appeared in reality, and the religious theory of life, — the consciousness of their own confusion of ideas, — the want of some comprehensive principle by which to regulate thought and action, of some real aim for exertion, — and the vain seek-

ing for some guiding thread to lead them out of this perplexing labyrinth into light and a straight path. At the cost of many years of struggle and trial, of failure and consequent suffering, they bought at last the experience they would so gladly have derived from other sources, and their aim is now to save such as may stand in the same position from this struggle which consumes the best years of youth, and absorbs, in seeking the path of duty, the energies which should be employed in following it. They have striven to place before the young that view of life which unites the present with the future, and harmonizes all its various phases into one continuous whole; — to point out those principles by which conscience may be enlightened, reason cultivated, the will brought into accordance with God's will, and the whole mind developed to that degree of perfection of which it is capable. In doing so, they have not aimed at originality or novelty, and they have gladly availed themselves of all the aid afforded by previous writers. The very choice of their subject precluded all ambition but that of being useful." — pp. v., vi.

No one, therefore, will be disappointed that the work has more of a practical than of a theoretical character,— that it is more noticeable for its power of analysis, clearness of statement, and soundness of tone, than for graces of style or an ambitious rhetoric. The writers themselves tell us, that "their highest hope has been to do good in their own generation, — to add their mite to the great treasury of human knowledge and improvement." This hope, we trust and believe, will be gratified. We cannot but think that a production of so great merit will exert a highly beneficent influence. We could have wished, however, that the treatment had been somewhat less dry and metaphysical, since the work would then have been brought within the sympathies of a larger number of readers. Still, it has many eloquent and beautiful passages; and we have not ourselves found it uninteresting or uninteresting.

A brief analysis of its contents will give our readers some idea of the manner in which the authors have fulfilled their task, and justify the grounds of this commendation. The first chapter is entirely preliminary in its nature, and is divided into two parts. In the first part the writers take a general view of the position and influence of women. It is contended that, whatever position they may hold in society, they always exercise an influence for good or for evil, according to the

moral and political state of the age, — either rendering it better if the elements of good predominate, or worse if the standard of morals be low. In our own time the defective education and inactive lives of most women tend to weaken their healthy influence, by making them frivolous and careless of the great interests which will be affected by them if they marry, or of that quiet labor for the good of others in which they may engage if they remain single. This subject is discussed at considerable length, with an examination of the duties which fall to their lot in the various relations of wife, mother, and single woman, and the preparation needful for the proper discharge of those duties. The following extract sums up much valuable wisdom.

“In the extreme uncertainty of woman’s fate, over which she has no control, it may appear difficult to some to determine how they can prepare for positions so different as that of married or single life. We answer, that a sound and liberal education is all the preparation needed for either; not mere acquisition of knowledge, but an education that will call forth the mental powers, and train them to exercise and form a high and decided tone of moral character. When men prepare by a peculiar professional education for their future career, it is because some peculiar branch of knowledge, some technical information, or familiar acquaintance with certain methods or forms, are necessary for that profession, which are not requisite for others; but the possible varieties of woman’s fate and avocations require no such preparation as this. The great requisite for them is the *general development* of the mind, as it *acts upon character*, that well-grounded and equable discipline of *all* the faculties, which makes them fit to labor should serious labor be required; that ready appreciation of all that is excellent and great; that wide sympathy with every real interest of mankind, which keeps heart and mind ever awake and active; — in a word, the habitual dwelling on the high ground where the mental and moral nature seem to blend in their mutual development, and which, if not the best training ground for attaining eminence in any special department of learning, is at least best fitted to give that tone to the whole mind which adds the weight of intellect to moral influence, and sheds the beauty of virtue and feeling over the exercise of mental power. She who by such an education is made most fit to be a truly valuable wife, most fit to acquit herself of the mother’s high office, will also be most fit to stand alone, should such be her lot, to walk cheerfully on her way, guided by that light from above shining into the soul, which ‘maketh all things light.’” — pp. 33, 34.

In the second part different views of life are considered in reference to their influence on education. It is maintained that higher views of life can alone improve the tone and elevate the standard of female education. Woman's intellectual training is shown to be inferior to her moral instruction; and the propriety of giving her a better education is then ably and successfully vindicated. This education should commence in youth, because then "the ardent nature and energetic impulses are unfettered by the world's prejudices, and unpolluted by the world's sophistries."

Having thus laid a broad and firm foundation for the further investigation of their subject, our authors proceed in the two following chapters to speak of the power and influence of habit, and the importance of forming right habits and of adopting some regular method as essential to all progress. The third chapter also contains some very acute and sensible observations on the difference between punctuality and method, and on the importance and value of economy. The necessity of method in the education of children is likewise well urged.

The fourth chapter is devoted to conscience and the government of the will. Conscience is regarded as the moral governor of our being; but reason is pointed out as an aid to its more effectual working, and the evil consequences flowing from the exclusive cultivation of either are admitted and explained. From this view arises the demand for a symmetrical cultivation of the character which is forcibly presented. Among other sound and practical suggestions, thoughtlessness, a fault so common in women, is censured; and the error of wishing a different sphere of duty is strongly and justly condemned.

The fifth chapter contains a somewhat elaborate disquisition on the love and pursuit of truth, and is divided into four sections. The value and beauty of truth are first considered; and the causes which have too often hindered a complete recognition of its value in other questions than those relating to physical science are briefly examined. The use of reason in the pursuit of truth is next treated; and the difference between moral proof and demonstrative evidence is explained, and the practical consequences of this difference are illustrated.

A consideration of the moral obstacles to the perception of truth naturally follows ; and the influence of passion, prejudice, impatience of doubt, narrowness of mind, and intolerance, in dimming its perception, are severally exhibited. Freedom of inquiry, it is shown, does not necessarily lead to indifference ; and to guard against its abuse, caution in expressing their own views and a wise deference to public opinion are inculcated as peculiarly necessary in women. The fourth section comprises an examination of the practical habits flowing from a love of the truth. There are good lessons for both sexes in the following paragraph.

“ The commercial crisis of 1848, and the recent exposures of railway transactions, have but too clearly proved the real want of honesty amongst the wealthy and educated classes of this country [England], and that to an extent which throws a stain on our national character. The same want is apparent in the universal effort to substitute appearance for reality, show for substantial value. It meets us in the endless puffs which fill our newspapers, in the lavish decoration of the shops, which the profits of an honest trade could not cover, in the loud profession of principles, and the private practice of jobbing, in the sedulous attendance at church combined with more sedulous devotion to the world, in all the shams, in short, which daily cross our path and deceive our hopes. These, however, are but the external symptoms of the disease ; its root lies deep in the education given to the young, and the motives of action held out to them. It is not our business here to speak of the education of boys, nor perhaps could our strictures be so justly applied to it. Generally speaking, we believe that boys and very young men think little of the world till they enter into it, except as the great arena in which they are to win the laurels of their boyish dreams. It is only after actual contact with it, that they become perverted by the general tone of society, and learn to think earnestness ridiculous, and real worth useless, when a counterfeit answers the purpose so well. But not so is it with women. From the hour that the little girl is told to hold up her head and be very good, *because* mamma has visitors, to that in which she is launched into society, adorned with every showy accomplishment, every art of dress and manner which can gain admiration and secure an establishment, the world is the one tribunal whose judgment she is taught to fear, appearance the one object for which she is taught to strive. Nor do we speak only of what is termed exclusively the great world. The daughters of the citizen, the shopkeeper, or the country squire have

each their world, great or small, to dress for, learn, dance, play, or sing for; and mothers, whether homely or fashionable, equally bestow their first care on their daughters' appearance. 'The exceptions are so few that they only prove the rule.'—pp. 166, 167.

This is followed by a short chapter on the love of moral excellence as a means of self-culture, and a longer chapter on benevolence, with a digression on love and friendship, containing much wholesome advice. This portion of the work, which is more especially devoted to moral culture, is completed by a survey of the instruments of moral discipline. These are treated under the heads of self-knowledge, self-control, and decision of character. Their importance is strongly insisted upon; and all misapprehension as to their true nature is carefully guarded against, while the practical virtues which spring from them are shown to be those most important to woman amidst the trials and sorrows that may befall her.

Passing from this part of their subject, the writers now enter upon mental training, and in the ninth chapter proceed to speak of observation, attention, the association of ideas, and the cultivation of reason, with some remarks on the imperfection of language. The value of a general method of study is then considered; and the understanding of an author's meaning, the manner of forming opinions concerning what is read, and the retention of the arguments adduced by any author, are set forth as the three points chiefly to be regarded. The value of works of reference, the advantage to be derived from a practice of writing observations on the various works read, and the choice of books, form the remaining topics treated in this connection.

In regard to a choice of subjects for study, our authors naturally make a division into essentials and non-essentials. In the first class the Scriptures of necessity hold the first place. Next in importance are mathematics; and the beneficial effect of a study of them in disciplining the mind is very well exhibited. The objections to the study of moral and intellectual philosophy are then answered; and the importance of these branches to all engaged in education is enforced. After these, a decided preference is expressed for a critical study of the language and literature of one's own country, and for a thorough

acquaintance with its history. Some knowledge of politics and political economy is also deemed necessary; and the value of an acquaintance with general history and foreign languages is advocated. In conclusion, the difference between slight and superficial knowledge is stated, to obviate any objection that might be raised against the studies recommended.

The twelfth chapter treats of the love of knowledge as a natural impulse which requires cultivation. In the present age, knowledge is regarded less for its own sake than for the advantages that it will bring. Hence, the higher branches are less cultivated by women than the more showy accomplishments; and the effects of this are seen in the frivolous characters which too many display. The beneficial influences which a love of knowledge for its own sake would exert on them in the various trials incident to their position are then portrayed at length.

In the following chapter the limited importance attached to the culture of the imagination in English society, resulting from the commercial and practical character of the people, is considered; and the advantages arising from its proper cultivation, and the disadvantages of its unchecked growth, are skilfully traced. Enthusiasm, regarded as the product of an unsound mind, is condemned, whilst a love of the beautiful in nature, art, and poetry is highly recommended. The value of a cultivated imagination to all women, but more especially to persons of advanced years, is eloquently pointed out.

The concluding chapter is devoted to religion, which is treated more in connection with the essential principles of Christianity found in all sects and denominations, than with reference to points of dogmatic theology. The peculiarity of Christianity is defined as lying in its motives rather than in its doctrines. It has no creed; but it contains great principles applicable to all the circumstances of life. Hence the possibility of error should be regarded in all investigations into the doctrines of religion. Intolerance is shown, however, to be consistent in the Romish Church, but to be inconsistent with Protestantism. And to sum up all in a single line, our authors declare religion to be the crowning aim of self-education. Here their labors are fitly closed.

The strain of the following paragraphs, near the end of

the volume, will indicate the tone of the whole treatment of the subject of religion.

“Would that we had the tongue of men and of angels to impress these things on the hearts of women, to waken them from their long dream of vain or solemn frivolity to a sense of the full power and importance of their influence on social improvement or decay! Would that we could convince them that Providence, by excluding them from the strife and struggle of public life, from the active competition for earthly rewards, has appointed them a nobler office, — the guardianship of every purer feeling which tends to a goal beyond this earth, — the training of that in the human soul which is immortal!

“But ere we can train this spiritual life in another, we must have trained it in ourselves. We must have made the principle of obedience to the whole of God’s will, through love to him, as the source of goodness, wisdom, and truth, the governing idea of our system of life, the crowning aim of our self-education. We need not enter into any detail of the means which Christianity supplies for the training and fostering of this principle of spiritual life. The Gospel, with its high and unchanging standard, is in every hand, and the conscience which is deaf to its clear and simple precepts, the heart that wants any impulse stronger than its words of divine love and mercy, the soul that cannot be stirred by its glorious hopes, can gain nothing from human aid. We would rather dwell upon the influence of such a principle upon our daily life and character.

“That it is the fountain-head of every virtue is too obvious to need mentioning; but there are some virtues which are its more immediate and especial results, and by our progress in which we may best test the strength of religious principle in our own hearts. The deep humility which is the natural attitude of the mind habitually looking up to the type of Divine perfection; the wide and tender charity which reflects in human character and actions the benevolence of the Deity; the resignation which accepts every event as the result of His laws whose will is perfect goodness and perfect wisdom; the serene cheerfulness which springs from the peace of a heart whose treasure is garnered up there, ‘where moth and rust doth not corrupt, nor thieves break through and steal’; — these are the attributes by which the Christian should be known, — but if we apply the test, how many shall dare to call themselves Christians? We might almost say, that these are the features most generally absent from the character of those who claim for themselves, in our day, the exclusive right to be deemed religious; — or, at least, that the opposite defects of presumption, intolerance, irritability, and moroseness, too often give the tone to writing and speaking on religious sub-

jects. It has been truly said, that 'to be good and disagreeable is high treason against virtue,' and the saying applies with double force to religion. Judged by this standard, how many of us are traitors to their own faith! Some people seem to think, that, when they have obeyed the positive moral precepts of the Gospel, they have done all it was their duty to do. They care not how many hearts they repel, how many minds they disgust, by the unattractiveness of their piety, and seem to think that they best obey the precept of loving not the world, by giving the world every cause to hate them. Unfortunately, the dislike they so justly inspire is transferred from them to the faith they profess, and the noblest, the most benign, and the most comprehensive of religions is contemned as harsh, and low, and narrow, because harsh, and low, and narrow minds have adopted it for their own.* The verdict is a natural one; men judge of the tree by its fruits, and conclude that to be a bramble on which they find thorns instead of figs. If, then, we really love our religion, and wish to see its influence extended, we shall strive to make it beautiful and winning, no less than estimable. Had this been ever the aim of Christians,—had religion been ever inseparably connected, by the lives of its professors, with every thing that is noble in human aspirations, every thing tender and holy in human affections, every thing beautiful and refined which appeals to the taste and imagination of man,—we might still, indeed, hear the doubt of the sceptic, but it would be that scepticism only which doubts of virtue because incapable of believing in any thing but vice. We should be spared the deep pain of seeing good and high-minded men turning away from a religion dishonored and desecrated in their eyes by the character of its professors."—pp. 455–457.

We have left ourselves no space in which to add any thing to this analysis. We can only repeat, that though we are compelled to differ in some points with our authors, yet in the main we cordially agree with them, and gladly commend their volume to our readers.

C. C. S.

* "See Foster's Essays. Essay on the Aversion of Men of Taste to Evangelical Religion."

ART. III.—CITIZENSHIP.

It is said that no age can understand itself. If it be so, we are certainly in a very bad case; for no age was ever so anxious to understand itself as this. Were it not for our intense interest in the subject, the incessant discussion of it would have become utterly wearisome. No literature ever bore such marks of self-reference and self-inspection. The old Indian lore, with its perpetual dream of absorption into the Divinity; the philosophy and poetry of Greece, as unconscious of all inward questioning as childhood; the stately verse, forensic debate, or academic disquisition of the Roman time; the scholastic learning and wild romance of the feudal age,—all these fail to exhibit any thing like the self-consciousness and self-questioning of the present day. It is, perhaps, a diseased sensitiveness to one another's opinion, springing from the freely developed activity and influence of so many minds. It is, we doubt not, a kind of democratic subserviency,—an extension of the individual self-consciousness,—a sort of collective "What will they think of it?" Nevertheless, we must fall a little into this way of the age, for it concerns the purpose we have in hand.

Now the age has doubtless many characteristics, but that which most impresses our minds, in our present view, is the *revolt against authority*;—not alone or chiefly against political authority, but against the authority of opinion, of all before-settled principles, whether political, religious, scientific, or social. Nothing stands fast. Every thing is disputed. Every thing has to be examined and settled over again. But more especially to the purpose of the present essay is it to observe, that from this revolt naturally springs a feeling of *personal individuality* before unknown in the world, or unknown as prevailing to the same extent. The revolt consists, in fact, in setting up individual opinion against all before-established opinion. Inquire into the inmost feelings of multitudes around you, and you will find it to be this: "I will think and do what I have a mind to." Conceive how few persons said that in the old Roman time, in the feudal time, or in any time before the present. Men adopted the opinions, with the vocation and social position, of their

fathers, — thought of nothing but to live and die in the same ; and all, fathers and sons alike, were bowed down unresisting before the supreme authority of the state.

How different it is in this age, and especially with us in this country, is plain enough to be seen. We are a nation of individualities, — of individual forces and aims, — of men independently working out, to an unprecedented extent, our own life-problem. It is our own strength, in some views ; it is the source of extraordinary energy, culture, and progress ; it has made us such a people as never before existed in the world. But in other views, this individualism is a peril, which is to be thoughtfully considered.

Our modern civilization, and perhaps *our own especially*, is often branded as selfish, money-loving, and materialistic. The charge may well be questioned, and it would be strange if it were true ; for what then would human *progress* mean ? We are no more selfish, perhaps, than men were in former ages, nor more avaricious ; “the love of money,” which is only the most obvious and visible form of selfishness, has been declared to be “the root of all evil,” from the beginning ; and, most assuredly, there is not less spiritual development now than in former times. But the marked feature of our civilization seems to be, that all these passions exist in independent, individual forms and forces, as they never did before. Hence they are more demonstrative and noticeable. They break out into multiform action. A man in a stirring and excited multitude of people is more sensible of their presence, and more annoyed by them, and more disposed to rail at them, perhaps ; but they were the same people before they came together. Modern life, compared with ancient, is like a *mêlée* or a tournament, compared with the routine of quiet and plodding toil.

Individualism in this country is seen in every thing. Every man acts for himself ; does business for himself ; labors for himself ; — nay, *fights* for himself ; the great difficulty with our troops in Mexico was to subordinate individual will and energy to military rule. We have no classes nor cliques, unless it be those of politics and fashion, and *these* do not move on in any fixed order. In the one, parties are continually splitting in pieces, and in the other, individual ambition is perpetually devising new

styles of living and modes of entertainment. No man builds his house, or cultivates his farm, or manages his factory, like another; he will have something that is *his own*. We have lately a new sort of *associations* springing up among us, but they only propose to give more power to the individual. What is it that the "Coöperative Labor Leagues" aim to do? Why, to break down the classes of grocers, coal-dealers, &c., and to establish joint-stock shops and trading-houses; to make "every workman a *copartner*."

Of the same general character is a certain tendency to *isolation* that is seen among us; a disposition to seek some secure retreat from the great social bonds. With some it is a denial of the authority of government,—a refusal to vote, to accept office, or to have any thing to do with the government. With others, it is a disposition to retire from the professions; to escape from the social obligations, the routine and bondage of professional life, that is, from the being obliged to do, as professional men, what they would not do as free, individual men. With others, it is the ideal, all through their professional or business life, of building up some guarded retreat in the country, dedicated to repose, to ease, to luxury perhaps, but dedicated especially to isolation and freedom from all social importunities, where the man can live as he lists,—ay, as *he* wills,—with nobody to hurt, or annoy, or make afraid in all the mountain of his security.

Self-will, indeed, is one form, or rather effect, of our individualism, that deserves special attention. Revolt against authority is, of course, disobedience to authority. In the first form in which it naturally arises, in its instinctive and unreasoning assumption, it is self-will set up against every other will. A man says, "I will obey nothing but my own conviction, my own conscience." Now the *revolt*, perhaps, is right, but the *consequent assumption* is very likely to be rash and blind. The personal conviction, the personal conscience, that is rightly guided, will soon come to see that there is something besides itself that is to be obeyed. It will come to recognize a Power above, a moral law of the universe, and a welfare of the state, as having lawful authority over it. It has parted from one kind of obedience, but it must reason itself into another kind of obedience. If it abjures

dogma, it must bow to truth. If it disowns the house of Hanover, or Hapsburg, or Orleans, it must pay more than equal loyalty to a just, popular constitution. If it refuses implicit submission to arbitrary authority, it must freely set up instead everlasting principles. It must reason itself, we say, into a new kind of obedience. Now this is precisely what many have failed to do. They are just in that transition state, between the old and new authority, where *self-will* is their only law.

For proof of this, we would rather appeal to experience than to overt acts, restrained as they are by many considerations. We would appeal to thoughtful and self-observant men, whether they have not found the principle of self-will running with them to very inordinate lengths; whether they have not found it good and right to pause, to sit calmly down, and to meditate anew the great conditions of their being. "What is this that I am feeling," such a one might say, — "this resistance to submission, this self-sufficiency, this hostility to every thing that comes in the shape of a thing imposed, or bound, or laid upon me as a law or duty? What is it that I am saying with myself, — that I am all in all to myself, — that *my* reason is my only guide, *my* conscience my only law, — that *I* am the world, and the universe, and all but the Divinity to myself? Is there not an all-encompassing Order, an overshadowing awfulness of law and right, to which it is good and right for me to bow down? Does not my reason, my conscience, point to a throne of Infinite Authority above me? Am I not also the member of a community, bound to it by a thousand ties, bound to regard its welfare, bound to love and serve it? Is not *obedience*, then, *lowly obedience*, for me a good and reasonable thing, a sweet and holy thing, at once the fittest posture and the noblest and loveliest form, which a nature like mine can take?"

Now the bearing of all **this** upon the subject mentioned at the head of this article is sufficiently plain. Individualism and self-will, in the diseased state in which they commonly appear, are directly opposed to good citizenship. That is to say, as principles, and carried to their utmost length, they are so. There is a sphere for them; and in that sphere the highest dignity attaches to them, and the highest importance. In the power of personal

will, it has been well said, man is likened to God. And individualism — that is, the free charge and care of one's self — is the indispensable condition of the highest human culture and progress. The value of this principle is not to be left in a moment's doubt or question. It lies at the bottom of our extraordinary national development and progress.

But while a man is thus free, and, as a condition of the highest culture, must act *from* himself, it is quite another question whether he shall act *for* himself. Here it is that we would interpose the most emphatic check to individualism. We say that every man is bound to be subordinate, subservient, obedient to the general good; to the good, first, of his neighbors around him, next, of the state, and last and highest, of the larger family of human kind. Fichte says, that the very end of the state is to draw men out of their individualism into subserviency to the general good of the race. It is certainly a sublime idea of the universal order and of the ultimate aim. But whether it is accepted or not, this at least is certain, that a state, or political community, *cannot be formed* without the yielding up, to a certain extent, of individual claims. The very *law* of its constitution is, that, within the proper limits of legal control, the private man shall do nothing to hurt or harm the commonwealth; and it is equally the very *spirit* of its constitution, that he shall do what he can to help and advance it.

The former specification embraces generally *criminal offences*, — we shall *not* do thus and so. But is there not a *positive* side to this obligation? Is our duty to the state limited to abstinence from crime? Does not the latter specification rather — the *spirit* of the constitution — open the sphere of real duties to the state, the sphere of good citizenship? In this light, at least, we wish now to present it.

Not serfdom, as to a despot, not loyalty, as to a king, but citizenship, the relation to the whole commonwealth, and the true spirit of that relation, — this is what we propose to consider. Montesquieu says, in the "Spirit of Laws," that "the principle of a despotic government is *fear*; of a monarchical, honor; and of a republican, virtue." What is this virtue?

We are not going to ring the usual changes upon the

general and the generally admitted *necessity* of virtue to a free state. This general statement, so hackneyed that it is almost as easily forgotten as it is easily recited, we wish to carry into detail; to press it home to persons, to individuals; to bring it to bear upon the spirit of our daily life, — upon the spirit of wealth, of learning, of religion, of education, of society, — upon every thing that we do or share in, as members of society.

Now it is a consideration too obvious to insist upon, and yet too important to omit at the outset, that in the free state, as compared with the despotic, there is a substitution of actors, of functions, of duties. The despotic government does every thing, instead of the people. It gives laws, preserves the public order, builds colleges and churches, hospitals and almshouses, and supports teachers of science and religion. In a free state, the people have all this to do for themselves.

Yet neither upon these obvious and ordinary duties of free citizenship do we propose to dwell. There needs, indeed, to be a more thorough understanding and consideration, and a more conscientious assumption, of *these* duties; and yet it may be admitted, perhaps, that in the main, and in a gross estimate, we have pretty well discharged them. We have made laws, and preserved order, and built colleges and churches and hospitals and almshouses, and provided for the maintenance of them all. For three quarters of a century our system has been sustained, and we have done more for the support of education and religion than any other country; we have made the government as stable, and the law as strong, as any country can show; and we have had fewer outbreaks and disorders than most of the nations in the Old World. It will not do, we think, any longer to deny the possibility of national self-government. That problem, at least, we have solved.

But we wish to carry our readers beyond this visible condition, to consider the interior life of the republic; to consider what is the spirit that it demands of its people; what spirit is necessary to develop all the energies, and to secure all the advantages, of this beneficent system. The happiness and improvement of a people depend not so much even upon law and order, not so much upon *any* institutions, as upon the spirit that governs it. Without

disinterestedness, without the spirit of brotherhood, without religion, no people can do well. Without these, the best, the freest institutions will only be the worse for them. Now, the very definition of a republic is, the *government of all for all*. What, then, should be the spirit of its people?

First, we say, a certain *disinterestedness*,—something beyond the general virtues of industry, honesty, temperance, fealty to the law,—a certain disinterestedness,—the old Roman patriotism, with a better direction. Not for any one person, not for any one class, is our political state established, but for all. To live, then, *not* for one's self, but to live for all,—this is its primary moral law. In a despotic government, selfishness is enthroned in the highest seat. And a man under such a government, living only for gain, for ease or pleasure, though he would indeed offend against humanity and against God, would not offend against the sovereignty of the land. That, perhaps, set him the example. But a man who lives that selfish life with *us* sins against the whole meaning and intent of the institutions that protect him. He has thanked the institutions, perhaps, for opening to him a free course to wealth or honor, and now he uses that wealth or honor to flout them in the face.

Let us attempt, in few words, to show what place disinterestedness has, and what offices it must discharge, in our system. It may sound in the ears of some like a kind of Quixotism to name the word in connection with any system of politics or society. *Interest*, we are sagely told, rules the world, and always will. Let it rule; let it have unobstructed sway among us; and see what are the consequences. Here, in our republic, there are no barriers to the popular will, to the popular tide; and we have seen that tide in these days rising with resistless force, all over the civilized world. If human nature were composed of only pure and harmless elements, all would be well. But alas! we know it better, and we know that the free condition for it is full of peril. In such a condition, the currents of evil, as well as the currents of good, have a free course. And what have we seen in our own country, with all its singular advantages,—a virtuous and intelligent ancestry, a sparse population, abundance of means, and a boundless new territory to relieve the pressure of

our social perils? We have seen a sad decline of political morality. We have seen a threatened repudiation of State debts. We have seen ignorance gaining ground upon knowledge, — the ratio of the uneducated absolutely increasing in various quarters. We have seen religious habits and institutions left far behind on the path of the bold pioneer. We have seen intemperance sweeping through the land in a fiery flood. We have seen a spirit of war and of territorial aggrandizement kindling half of the nation into a flame. And we have seen human servitude, which, in the instinctive consciousness of our nobler fathers, South as well as North, was regarded as an evil, as an anomaly that ought not to disfigure with its literal *name* the compact of the Constitution, — we have seen it boldly vindicated as a *good*, and as an *honorable* and *admirable* institution. Our readers will agree with us in regard to most of these specifications, if not all of them. They will agree with us, that these are fearful tendencies of the selfish principle. And suppose now that they had been suffered to go on unchecked. Suppose that the opposite principle, which some worldly-wise men may call Quixotic, had not aroused itself in this country. Suppose there had been none to rise up with remonstrance and resistance against those dangerous tendencies, — none to fling themselves into the path of the destroyer, — none to devote their time, talents, wealth, influence, to the cause of the public enlightenment and virtue. What then? We had been on the high road to ruin! We had been far gone on the way! *Private, voluntary, disinterested exertion has saved us.* That exertion must not be relaxed. It must be increased.

There is a noble band of men in this country, engaged in the promotion of knowledge, education, religion, peace, temperance, private virtue, and social justice. Some of them are connected with associations; others are fighting single-handed through the press. Some have forsaken the path of accumulation, and others that of professional or political distinction, to devote their lives to the sacred cause of the public welfare. It is the great *disinterested party* of the country. They ask no office, no fortune, no shout of praise; they ask only to make people better. They encounter reproach; they expect it.

There is no body of men in the country that we look to with such interest and hope as to this often reproached, antagonistic, reforming, corrective body. Disband it, and a voice of jubilee and triumph would go through all the ranks of the disorderly, the violent, the intemperate, the licentious, the corrupt, the corrupters of society and the oppressors of their kind. Destroy it, and a wail would go through the world over its extinction. Even by holding up its various standards against evil, it does much. But it does far more than this; and it has far more yet to do. Its numbers must be increased; and it must be reinforced with all the moral energies of the country.

There is another form in which we trust that social disinterestedness is yet more and more to appear among us, and that is in the quiet consecration of superior talent, wealth, and leisure to the general improvement of society. To illustrate what we mean, — there are among us not a few successful aspirants after fortune or easy competency, men of worth and ability, who in business or in a professional career are accumulating the means with which they intend to build up somewhere — probably in the country — a seat of ease and comfort for their declining days. Or else inherited property may enable persons of taste and intelligence to establish themselves for life upon such a plan. Now there are two views with which such a superior and independent position may be occupied. The old idea, the feudal idea, the selfish idea, was to use wealth for one's own pleasure or aggrandizement. The idea which many still have of retiring from business with a fortune is to retire into some guarded seat of luxury and splendor, from all contact with the mass of society. To be independent, to be alone, set aloft even from all neighborly relations with all but a few, — this is the ideal of what is called a *gentleman's* residence in the country. The other view is carried out by one who seats himself down in the country, in the bosom of all kindly and useful relations with those around him; who lives not an indolent nor a selfish life; who labors to improve the agriculture around him, to improve the schools, to improve society in every way. Without any formal proceeding in the matter, without ostentation, how many services may a kind and

wise man, with superior intelligence or means, render to those around him! For such persons, whether in town or country, there is a momentous mission among this people. Under feudal institutions, society might hold on to its miserable tenures and conditions, without any such larger and nobler view on the part of its leaders and lords. But a new era has come now, and a new thought must penetrate and mould it. The noblest opportunities, the largest means, the revenues of broad estates, must not be wasted upon the indolence, the luxuries and vices of their possessors. To make fair ladies and fine gentlemen, who are nothing more, — this was not the end of heaven-sent wealth. It must not be. The fountain-heads of society must not be poisonous or stagnant pools; if they are, the land will be stricken with barrenness and desolation. We would implore those whom God has blessed, whom society has helped, whom free institutions have fostered and built up, perhaps from lowly conditions, into wealth and honor, that they make some due return for all this into the bosom of society, into the family of God's creatures. We would implore them to fulfil this noble mission of beneficence, of kindness, of helpfulness to all around them. Amidst blessings, not envyings, let them live, and "sleep in blessings" when they die. Then, when the solemn bier shall bear them to the last home, the people shall not look askance from their labor-fields, and coldly or idly say, "Well, *he* is gone!" — but they shall follow him with benedictions, and bedew his grave with their tears, saying, "Our brother, our friend! God has taken him!"

Next to the disinterestedness of individuals, the *fraternization* of the whole body of society is the demand of free institutions. Barbarism, despotism, aristocratic claims, have divided men as if they were of different species. Christianity, culture, liberty, bring all men to feel that they are men, that they are brethren. How to make *all* happy, intelligent, comfortable, good, and noble, — that is the question *now*.

In order to this, it is not necessary to make the property, talent, or honor of all men equal. That is impossible. If there were an agrarian distribution of property to-day, the difference of men's faculties would make a distinction to-morrow. It is of no impossible, literal

equality, then, that we are thinking. But we would break down that vile *aristocracy of position*, which allows any man, because God has made him stronger, richer, loftier, to treat with slight or injustice his weaker or humbler brother. There is that in every honest man which is infinitely grander than any condition. We would see the poor man, the day-laborer, who felt *that*, and who, in that feeling, is manly, erect, gentle, and courteous; yes, the true *gentleman*, in comparison with some proud, discourteous, world-denominated superior; the true *gentleman*, we repeat, whose innate dignity and nobleness and kindness should make all the assumptions of our immature civilization ridiculous. There was often a heroism in the old feudal time, in the manly protection and loving deference of different classes. There was something far more beautiful in it than that which is too often seen to-day, in the general scrub-race and selfish scramble for fortunes, honors, offices, distinctions of every sort. But is there not a heroism now called for, now rising in society, nobler than that of all feudal, of all heroic time,—the heroism of men who can forego all unjust claims, who can surrender all lordships, dignities, robes of old custom, to the rights of sound manhood,—who can stand together as brethren, as fellow-beings before God, in mutual respect and common humility?

So much for the *sentiment* of fraternity; the practical working out of the principle presents a far more difficult problem. The French people, in the late revolution, were at one moment much engaged in discussing what they called “the organization of labor.” The journals informed us of a commission sitting in the Luxembourg, to investigate this subject. Poorly as it may have been managed, yet, as to the matter in hand, it was in our eyes the most momentous tribunal that can sit upon the earth in these days. What could it do? What could it do with a subject so vast, so complicated, so intermingled with all the relations of society, so vitally touching the rights and interests of men? We do not know. But this we know,—that *something* must be done. This we know, that if the rivalry of need, the competition for bread, goes on, and if the pressure of capital goes on, pushing wages lower and lower towards the very point of starvation; if thousands and

millions are to sink down under this ill-remunerated and crushing toil; if millions of our fellow-men and women and children — half-clad, half-starved, pale, trembling, almost denuded of their very humanity — are to be the operatives of the world, humanity will not bear it; and indeed it were better to go back from our perilous freedom to the feudal relations of baron and serf, — nay, better to fly from the curse of liberty to the curse of slavery itself. O brotherhood of men! what is it when men die for lack of food, — when women, in the garrets and cellars of all our cities, are pining and wasting to death over their unrequited toil, — and they weave their *shroud* in the gay garments which they fashion for the idle and opulent!

Yes, Brotherhood, Fraternity! well was that word uttered among the watchwords of the new republic of France. And France, Germany, America, the world, must learn what that word means. *Selfish individualism* is the curse of all men and communities, the root of all trouble and mischief, private and public. This is the poisonous element in all human conditions and relations. Extract that from the heart of society, and then wealth is good, and honor is good, and poverty is good, and toil is good, — every thing is good. Take that away, and any political relations can be made to work well for human happiness and improvement. But let that accursed principle loose, to have free and unrestricted course, and Plato's republic, Washington's, Lammartine's, any republic, any system of liberty that the wit of man can frame, will but nourish the freer growth of monstrous evils, that will overshadow it, and weigh it down, and scatter it in the dust.

Solemn in our thoughts, therefore, deep in our hearts, must sink the deepest principles of *religion*, if we would build on these shores a happy realm, — if we would find in this free heritage a happy life. Religion, we say, in fine, must consecrate the true citizenship. To reverence God, the God of nations; to feel the grandeur of his authority in our consciences; to bind our hearts in fealty to his will; to live as in the great Taskmaster's eye; to further his purposes of wisdom and goodness in the world, and to remember the solemn account, when the breath that wafts us on this tide of time shall have

died away for ever, — without this, this high and holy consecration of our being to the general weal, no freedom is good, no country is happy, no life is blessed.

We thank God that we do not hear now, from revolutionary France, the old cry of No religion! No Christianity! No Sabbath! No God, but reason! Evil and dark was the omen; and darkly was it fulfilled. The silent steps of retribution for ever proclaim the righteous authority that is over all. A miserable blasphemer* in the old revolution once stood up in the Assembly and said, — in language almost too awful to repeat, — thus he said: "God! if you exist, avenge your injured name; I bid you defiance! You launch not your thunder-bolts; who, after this, will believe in your existence?" No lightning-flash struck down the impious railer; no thunder-bolt gave answer to his blasphemous adjuration; but the unchained passions of a heaven-defying mob, the atrocities and woes beyond parallel of those awful days, gave answer; the guillotines, the butcheries, the suicidal stroke of the revolutionary axe, that cut off the heads of that hydra of impiety and rage, — the boiling up from the lowest hell of human depravity of all that can curse the earth, — all this gave answer. All this shows what a nation may be without religion, without God.† But it is not so now. Now no goddess of reason is installed and worshipped in the *Champ de Mars*. Now, when the image of Christ is brought forth from the sacked Tuilleries, the people pause; they say, "Reverence the Master"; and, with uncovered head and reverent homage, they bear the sacred form to the holy sanctuary.

* Monert, a comedian. Alison, Vol. II. p. 47.

† Lamartine says, in his History of the Girondists, that "the spirit of the revolution was religious." Then we think we must have a new definition of religion. Chateaubriand, somewhere in his *Etudes Historiques*, replies to certain of his countrymen, — who have attempted to philosophize the horrors of the French Revolution into a heavenly order and method of social regeneration, — by pointing to its unspeakable atrocities, and among others to the *fusillades*, in which hundreds of children were gathered together and shot down in cold blood. Did we say, in cold blood? By bloodless fiends, rather. With Mr. Carlyle's remarkable writing on this subject we can go along, so far as to admit that the selfish and heartless inhumanity of the French nobles, for ages, provoked this horrible retribution, and deserved scarcely less. Still the fact stands, we think, incontestable, if we will take the pains to discriminate it, that the French Revolution was the most terrible boiling up of the deeps of human depravity, the most portentous ebullition of inhuman, of infernal passions, of mingled rage, cruelty, and blood, that ever was witnessed among civilized men.

This conduct of the French people, together with the wonderful order, self-restraint, respect for property, and even brotherly kindness, that appeared among them,—and with all this, similar indications all over Europe,—may well awaken in us a religious emotion. We may feel, without presumption, we hope, that the hand of God is among them; that the Father of mercies is shedding a portion of his own spirit upon them. We may hope in God that the days of violence and bloodshed are passing away. We may hope in God, that the great day of human fraternity is coming. Is it *too much* to hope—or must it for ever be a dream?—that men will yet learn to love one another, to help one another, to respect, befriend, strengthen one another, to give up pride and strife and sensual excess and base self-seeking and bad ambition, and to unite together for the common weal? We will not believe it is too much to hope. We see a new heaven and a new earth, yet to be. We see the earth cultivated by laborious hands, withdrawn from war and strife,—cultivated to a bountifulness and beauty never before known. We see the dwellings of men more thickly planted on the now waste and barren deserts, but more richly replenished; the vile hovels, unfit for the residence of beasts, have disappeared; the pest-houses of filth and drunkenness and debauchery are gone. We see governments more just and benign, and the people more content and happy, and the nations dwelling together in amity. We see a race that can *believe* in law and love, in righteousness and peace.

But alas! we do not believe in them yet. We believe in wealth and pleasure, in force and will, in armies and battlements. But faith in higher things, in truth and right and moral power, in the only and everlasting resources of humanity, has not yet come. And *yet*, therefore, must we implore all the solemnity and safeguard of religion to come down and dwell among us.

And never, we think,—never so much as now. Never, we believe, since the world began, was there such a crisis in the world's affairs as now. Never was there occasion for so deep a thoughtfulness and solicitude and prayer for the world's welfare as now. Among all nations, in all dwellings, in all solemn temples, should it be deeply meditated upon. For now, the PEOPLE'S REIGN

has commenced! Whether in the form of a republic or not, is immaterial; all power has visibly gone, or is fast going, into their hands. Now the PEOPLE'S REIGN has commenced! And now, therefore, the hope of the world lies in true citizenship,—in true, disinterested, fraternal, religious citizenship.

O. D.

ART. IV.—SCEPTICISM IN SCIENCE.*

NOTHING is so well established in religion or morals, in history or science, as not to be doubted or denied by some one. The more presumptuous this doubt or denial, the more is it likely to excite attention, and obtain a momentary, if not a permanent influence. All human knowledge, even the most positive, is tainted by scepticism. Even the physical sciences, which deal directly with present and sensible facts, are not clear from this stain. Geometry, in its first elementary steps, no less than in its highest walks where it seems scarcely to touch the earth, does not tread so firmly and see so clearly as

* 1. *Outlines of a System of Mechanical Philosophy, being a Research into the Laws of Force.* By SAMUEL ELLIOTT COUES. Boston: Charles C. Little and James Brown. 1851. 12mo. pp. 330.

2. *Unity of Purpose, or Rational Analysis, being a Treatise designed to disclose Physical Truths, and to detect and expose Popular Errors.* By AUGUSTUS YOUNG. Boston: Printed by S. N. Dickinson & Co. 1846.

3. *On the Motions of the Earth and Heavenly Bodies, as explainable by Electro-magnetic Attraction and Repulsion, and on the Conception, Growth, and Decay of Man, and Cause and Treatment of his Diseases, as referrible to Galvanic Action.* By P. CUNNINGHAM, Surgeon, R. N. London: Cochran & McCrane. 1834.

4. *Essay on the Theory of Attraction.* By JOHN KINNERSLEY SMYTHIES. London: Richard & John Edward Taylor. 1850.

5. *A Million of Facts, or Correct Data and Elementary Constants, in the entire Circle of the Sciences and in all Subjects of Speculation and Practice.* By SIR RICHARD PHILLIPS. London: Darton & Co. 1848.

6. *The Anomalies of the Present Theory of the Tides, elucidated by Additional Facts and Arguments. Together with Remarks on the newly discovered Planet, its Negative Disturbing Power, etc., etc.* By THOMAS KERIGAN, R. N., F. R. S. London: Simpkin, Marshall, & Co. 1847.

7. *Notes on the Kinematic Effects of Revolution and Rotation with Reference to the Motions of the Moon, and of the Earth, which are assumed in the present System of Astronomy. With experimental Illustrations.* By HENRY PERIGAL, Esq., F. R. A. S., etc. Second Edition. London. 1846-50.

8. *An Examination of the Astronomical Doctrine of the Moon's Rotation.*

to command universal assent to all its demonstrations. The anathemas of the French Academy of Sciences, which banished particular subjects, such as a "perpetual motion," the "quadrature of the circle," and the dispute concerning the "*vis viva*" and the "*vis mortua*," from its deliberations, have not been sufficient to convince or silence the disputations.

The Newtonian law of gravitation, if it now stands on a firm foundation, does not owe its stability to the forbearance and gentleness of those who have ventured from time to time to assail it. John Hutchinson exalted the *Principia* of Moses above Newton's *Principia*. He declaimed against all human learning, and looked to the Scriptures for a complete system of natural philosophy. As the law of gravitation is not mentioned in the sacred physics, the law of gravitation was rejected as not true. But to assail the law on theological or metaphysical grounds is less marvellous than to declare that it is irreconcilable with facts. Le Seur and Jacquier, who published the second volume of their commentary on Newton's *Principia* in 1742, made this degrading declaration : —

"Newton, in his third book, adopts the hypothesis of the mo-

tion. "Strike me, but hear." By J. L. Edinburgh : Adam and Charles Black. 1847.

9. *Treatise on the Nature and Effects of Heat, Light, Electricity, and Magnetism, as being only different Developments of One Element.* Cambridge. 1827, by Marshall Tufts. 8vo.

10. *Principles of Natural and Metaphysical Philosophy, intended as a new Account, concise and popular, plain and more consistent also with later Improvements than the Cartesian or Newtonian.* Cambridge : Hilliard & Brown. 1829.

11. *The Universe as it is : wherein the Hypothesis of the Earth's Motion is refuted, and the true Basis of Astronomy laid down.* By WILLIAM WOODLEY. London. 1829. 8vo.

12. *A New Theory of the Tides.* By CAPTAIN FORMAN. London. 1822. 8vo.

13. *On the Proximate Causes of Material Phenomena and the Two Principles of Universal Causation.* By SIR R. PHILLIPS. London. 1821. 8vo.

14. *Protest against the prevailing Principles of Natural Philosophy with the Developments of a Common-sense System.* By SIR R. PHILLIPS. London. 8vo.

15. *New Elements of Geometry.* By SEBA SMITH. New York : G. P. Putnam. London : Richard Bentley. 1850.

16. *On the Correlation of the Physical Forces : being the Substance of a Course of Lectures delivered in the Royal Institution, in the Year 1843.* By W. R. GROVE, Esq., M. A., F. R. S., Barrister at Law. London : Samuel Higley. 1846.

tion of the earth : we could not explain his propositions without making the same hypothesis. Hence we are compelled to take a character different from our own, for we profess obedience to the decrees promulgated by the popes against the motion of the earth."

The Newtonian theory was, however, taught in Catholic universities under the name of *hypothesis*, until in 1818 Pius the Seventh repealed the edicts against the Copernican system.

Captain Smyth, the President of the Astronomical Society of Great Britain, describes the symptoms of the anti-Newtonian disease as follows : " A feverish anxiety to square the circle, trisect an angle, duplicate the cube, and detect perpetual motion." To these we may add, a dread of the higher law of the calculus, and a facility at constructing a theory which gives an incomparable explanation of the whole of physics and chemistry. Moreover, these scientific knight-errants, after dethroning Newton, throw up their caps for Kepler, whom they imitate in his prurient imagination, if not in the admired harmonious movement with which his fingers played upon the shape, velocity, and distances of planets.

Few persons, perhaps, are aware how abundant the English scientific literature is in works which illustrate and defend the anti-Newtonian heresy. The long file of titles with which we have introduced our article will satisfy the reader that scepticism on matters of science is not likely to die out at present for want of material. We propose to furnish an account, more or less in detail, of some of these extraordinary productions.

After skimming from these writers all their superficial peculiarities, there remains behind a large residuum of family resemblance which is quite remarkable. They all repeat the same story about ancient dogmas, popular errors, the too easy faith of the world in its scientific guides, and the tyranny of great names. They do not hesitate to criticize with flippant arrogance the matchless works of Newton and Laplace, which they are incapable of reading, and of which all they know has been learned at third or fourth hand. They all appeal, as with one voice, from the doom which has been pronounced on their own heads by men of science, — the doom of not being read at all, or, if read, soon forgotten, — to the

judgment of an incompetent mass-meeting ; and as they are always sure to gather around them a knot of admiring and credulous disciples, they mistake the applause of the dissatisfied few for the voice of the world, and the verdict of the world for that of truth and nature.

“ And should the fact be disclosed,” says Mr. Young, “ that many matters which are now almost universally esteemed sublime scientific truths are but dark and occult errors, the inquiry will naturally suggest itself, whether it may not have been found necessary to clothe them in a mathematical dress so wholly incomprehensible to the mass of mankind, as to make it a hopeless task, from want of leisure and other facilities, to investigate the truth or falsehood promulgated by the learned through the medium of what is so triumphantly termed the higher branches of mathematics ; and hence, whether mankind, in general, have not been compelled to remain ignorant of those supposed physical truths, except by a confidential faith in those who profess to teach these things.”

Scientific reformers do not excel reformers in general in modesty, charity, courtesy, or good temper ; and they cannot plead, in extenuation of their fault, their moral indignation at a great wrong or iniquity which they are attempting to dislodge from society. These men, with all their noise and fluency, do not derange for an instant the slow but triumphal march of science, and what they write is read with much more interest for the lessons it teaches in psychology, than for its scientific value. Many persons, who do not profess to be judges of the matter in dispute, will make up their minds how much confidence is to be placed in these *parvenues* in science when they see the free and dashing style in which they dispose of Newton and others of like intellectual magnitude. Mr. Young pronounces Kepler the father of physical astronomy, and declares that no discovery has been made in it since his time, which deserves the name. “ I will here declare that I have yet to learn of a single beneficial discovery or principle, originally promulgated by Sir Isaac Newton, in any wise beneficial to physical astronomy.” Mr. Coues takes the same position, in reality, if not in so many words.

Arago, in the fourth edition of his *Leçons d'Astronomie*, published in 1845, says of the present explanation of the tides, “ Cette théorie est aujourd'hui audessus

toute contestation." He ought to have made an exception in favor of the writers under consideration. In this spot, particularly, does the law of gravitation chafe their sensitive minds. Mr. Young declares the Newtonian theory of the tides to be a "tissue of absurdities and dilemmas": an inflated superstructure, built upon the sand, with "the calculus for stones, and fluxions for mortar." Lieutenant Kerigan stigmatizes it as a "gross fallacy, a palpable deceit or absurdity, and an insult to the law of gravitation on which it is founded." And all this, because, in circumnavigating the globe, he did not find the waters rise, to an inch and a minute, at every part exactly as the theory requires. No allowance is made for the embarrassments the moon's attraction encounters from the irregularities of straits and the interposition of continents and islands. The tides are expected to follow an air line over the whole earth. Other lieutenants, and even captains, have caught this ship fever. We need mention only the names of Lieutenant Brothers and Captains Woodley and Forman, the latter of whom remarks that Newton is "continually committing the grossest blunders, in consequence of neglecting the rules of geometry," for which he "richly deserves to be decorated with the cap and bells." The distinguished astronomer, Captain Smyth, justly observes:—

"It is surprising that a navigator, of all others, should not have satisfied himself that the tides follow periodically the course of the sun and moon, especially as old pilots, albeit unacquainted with theories, predict the times of high water, with considerable truth, by the mere compass-bearing of our satellite. The Newtonian theory of tides was put to practical test in the late war, which ought to have worked conviction in the minds of naval officers. The blockade of the Texel was successfully managed on a system at once economical in anxiety and labor. The ports of Holland admit of the ingress and egress of large ships only during spring-tides, two days before which our squadron regularly took its station off the Texel, and remained there only as many days after the full and change of the moon, so that the Dutch lost all the advantages of high tides, and their heavy ships were effectually detained within their harbors. This amusingly countenanced the well-known assertion of M. Le Prieur, that tides were attached to the ocean to facilitate the entry of ships into their respective ports, a conclusion which Voltaire held to be equivalent to contending that legs were made to wear boots."

Few passages in the history of science are read with greater interest, and even admiration, than those which relate the anxiety and caution with which Newton contrived to elicit his law of gravitation from the motions of the moon. But, according to Sir R. Phillips, this law is nothing better than an "execrable superstition" of Newton, and the history of its discovery is called by Mr. Young "a moon story." "How juggling," cries Sir Richard, "to compare a paper fall at the moon with a real fall at the earth." Why, says he, the moon falls one hundred and thirty thousand feet in a second, and not sixteen feet, as Newton supposes! Mr. Coues and Lieutenant Kerigan have a more respectful vocabulary; but they seem to agree with Mr. Young in his disgust for the commonplace expression, "Sir Isaac Newton found"; and to be of his opinion also, that every thing which Sir Isaac found, the world has been loath to lose again. Some of these writers stand aghast at one difficulty, some at another. Lieutenant Kerigan is staggered at the thought that the sun attracts the moon two and one fifth times as much as the earth does; hence, at her very first conjunction with the sun, this "pride and ornament of the earth" would forsake her for ever. The comprehensive fault with these scientific sceptics, which comprises all their individual peculiarities, is, that they confound relative and absolute forces, and also relative and absolute motions. Captain Smyth relates that Sir Richard Phillips called upon him, in a cavalier style, and invited him to a scientific tournament by discussing these errors of Newton, which he "almost blushed to name," and which were magnified in the *Principia*, "to puzzle the vulgar." He declaimed against the creed of science, which he described as the "trinity of gravitating force, projectile force, and void space." "But," he says in one of his books, "the wonder after all is far less that a system-maker should be seduced to make the assertion, than that mathematicians and men of moral worth should, from 1687 to 1831, have been mistaken enough to believe and teach such nonsense with solemn emphasis."

The sceptics in science are nearly unanimous in their suspicion of the centrifugal force; but they do not all reject the law of gravitation. Mr. Young thinks there may be an attraction by the sun inversely as the dis-

tance; that it arises from a magnetic induction exerted by the sun. He refers the tides to magnetic attractions, and the greater tides of the lunar action to the invariable position of the moon's magnetic poles. Mr. Coues will sympathize most cordially with him in his desire to reform the planetary densities, and bring them all up to a single mark. The habit of mind in which these writers have indulged, of considering the motion which they see in nature a single motion and the product of a single force, and of rejecting all elementary conceptions and all analysis, prepares them to receive with a poor grace the well-known theory of planetary perturbations. "This is the theory," says one of them, "which has converted the whole universe into a system of disturbing forces, and the whole corps of astronomers into an exploring party, whose business it is to search out and regulate disturbances." Lieutenant Kerigan complains against these astronomical policemen, because they are unable, even with their perfect organization and their activity and their deep interest in the law of gravitation, to keep order among the planets. He asserts that the law of gravitation, if admitted, cannot explain the disturbances, and he brings out his scanty supply of arithmetic, geometry, and trigonometry to rebut Lagrange and Laplace. He supposes that Neptune cannot disturb Uranus, because Saturn disturbs the planet more; that the earth cannot attract Venus, because the attraction would be forty-three times greater at inferior conjunction, when the planet moves the slowest, than at superior conjunction, when she moves the fastest. The shallowness of these objections to the old theory is surpassed by the freedom with which the same writer carries on his own speculations. He enlightens us with the remark that the satellites attached to a planet increase in number with the distance of the planet from the sun. This law gives ten or twelve to Uranus, *though but six are visible to the best telescopes, on account of the distance.*

About the middle of the last century, a discussion arose between Mr. James Ferguson and an anonymous writer, whether the moon turned on her axis, and in the same time in which she performed a revolution in her orbit. Within two or three years, the discussion has been revived by Mr. Perigal, a Fellow of the Royal

Astronomical Society of Great Britain, and another writer, whose book we have already mentioned by title, both of whom take the ground that the present analysis of motion is incorrect. The question is interesting, not merely as it concerns the true principles of studying motions of rotation and revolution, but also as, if settled against the practice of mathematicians, it will modify the common explanation of our seasons, of the sidereal day, of the moon's librations, and of the motions of the satellites in general. The whole difficulty with these mechanical sceptics seems to arise from their assuming too complete an analogy between the free motions of planets connected by gravitation, and the revolution of a body about a centre with which it is united, not by attraction, but by some material link. Such men will not, however, be persuaded; nor do we write with any such intent. "Those who reason upon subjects which they do not understand must advance arguments not worth refuting in form; but their reckless assurance may be noticed." This assurance is betrayed in the following extract from J. L.:—

"The rotation which astronomers ascribe to the moon is just as purely hypothetical and groundless as any Ptolemaic epicycle; yet has this doctrine been allowed to remain a foul blot in the temple they have reared to the glory of physical science."

Mr. Perigal joins in this sentiment, for he says, —

"It is, therefore, highly expedient that astronomy should be elevated from an hypothetical to an experimental science: its theoretical doctrines based only on ascertained facts, exclusive of postulates and independent of artifices for compensating doctrinal errors."

These scientific iconoclasts have attacked with sacrilegious hands even the foundations of pure geometry. The "New Elements of Geometry, by Seba Smith," furnishes a fresh illustration of this statement. The author informs us that he was incited to his task by reading a work of John A. Parker on the *Quadrature of the Circle*. Of this work, which will not, we are assured, be long withheld from the public curiosity, Mr. Smith makes the following remark: "I was at once much impressed with the boldness, strength, and originality of his reasoning, and finally convinced of the truth of his solu-

tion of that remarkable problem, which had long since been pronounced by mathematicians and learned societies as an impossibility." Mr. Smith was in exactly the proper state of mental preparation for forming such an opinion. He had, as he tells the reader himself, studied three or four books of Euclid's Elements at college, thirty years before; but the little which he once knew superficially had entirely faded from his memory. Starting as he did without any prejudice in favor of the ancient geometry, it is not surprising that, after two or three years of study, he concluded that Mr. Parker was correct, and all the geometricians in the wrong; and that, having made the discovery, he was anxious to give the world the benefit of it. "Should I be met," says Mr. Smith, "at the threshold by the incredulous world, and reproachfully or satirically asked, in the words of Paul, 'Who is sufficient for these things?' I shall reply in the humble spirit of the same Apostle, when he declared that God had chosen the foolish things of the world to confound the wise, and God hath chosen the weak things of the world to confound the things which are mighty." Euclid, and all other geometers who have succeeded him, define a line to be length without breadth, and a surface length and breadth without thickness. Mr. Smith says: "I meet these definitions at once, and declare that every mathematical line has a *breadth*, as definite, as measurable, and as clearly demonstrable, as its length; and that every mathematical surface has a *thickness* as definite, as measurable, and as clearly demonstrable, as its length or breadth." As surfaces are bounded by lines of definite breadth, and as the area of these lines is subtracted from the whole area of the surface, the author finds it easy to prove that, in some cases, the area of the surface is less than the circumference.

"It is not strange, therefore, that, while a fundamental principle in mathematics remained shrouded in darkness, the professors of that science should have been led into a thousand laborious and useless speculations, upon questions in which that unknown principle was necessarily involved. Indeed, from these causes, the mathematical sciences, like a very luxuriant vine left without pruning, have run out into immense quantities of foliage, bearing comparatively but little fruit. This state of things has become a reproach to mathematics."

We now proceed to consider, in some detail, the *Outlines of a System of Mechanical Philosophy*, by S. E. Coues. Those readers not familiar with the crude literature on scepticism in matters of science may wonder at the boldness and originality of this author. He makes an indiscriminate attack on the theories universally accepted by the best judges of science for explaining the physical phenomena of the universe; and aims to render the blow fatal by denying the truth of those mechanical principles and the accuracy of those methods of mathematical demonstration which have guided scientific research to its present conclusions. He has found it more agreeable to doubt and deny, than to study and understand. He has found it easier, and any one who repeats the experiment will find it easier, infinitely easier, to publish a loose and rambling sketch of a new system of mechanical philosophy, which he has not paused to verify, and which is incapable from its vagueness and generality of being verified in its details, than to follow the slow and beaten way, which the cultivators of a sober and stable science have trodden with labor, but not without hope.

In the department of natural history, and we include in this general designation the natural history of the heavens, modern science excels the ancient achievements, principally by the use of those potent implements of observation which have given an almost miraculous increase of sharpness to the best natural senses. Aristotle was a good observer. Few in modern times see so clearly with the telescope and the microscope as he did without either. But in mechanical philosophy, in the development of the doctrine of force, modern science asserts its strength and its superiority. The genius of Rome, Greece, and the other and older nations which partook of that ancient civilization, with all its art and philosophy, with all its learning and accomplishment, makes no pretension to rivalry on this subject. Few things in the history of modern science are more interesting, than to watch the labor and pain with which the laws of equilibrium and motion, and the conception of a material force, which are now the common heritage of science, struggled into existence. If the birth was slow and anxious, the growth has been rapid and vigorous. Sun, planets, and stars are claimed as subservient to sci-

entific scrutiny; and the foundation of the celestial mechanics were laid by Newton soon after Galileo discovered the laws of falling bodies, and traced the course of a projectile through the air. The laws of motion, shining down from the sky as well as calling up from the earth, might not have been discovered by man so soon, had not his eyes been open to the illumination above while his ears were listening to the instructions of the earth. He needed to experiment on motion, on a small scale, upon the earth, and at the same time to behold it on a magnificent scale, in its free and prolonged play in the heavens, before he could eliminate the accidental, the fluctuating, the evanescent, and apprehend the true meaning of nature's modest teachings. The history and the progress of physical and mechanical science since that time, its industry and its success, are too well known to require any rehearsal. It is the common opinion of men, that some truth has been discovered; that a positive science of the physical universe has been constructed; that some insight has been obtained into the philosophy of the things of sense. Occasionally, the laws of motion, the doctrine of inertia and of the centrifugal force, have been challenged and reëxamined. But every new application to any point in the widening circle of the sciences has added strength to conclusions which were already sufficiently strong. Some have looked upon this great and successful devotion to physical science with suspicion and alarm; but few have questioned its reality.

Mr. Coues makes his heaviest charge upon the law of gravitation, being assured, if that is shaken, that the most considerable portion of the structure of modern physical science will fall with it. He tells us that this law of gravitation is inadequate as a cause, inasmuch as the only thing which it investigates and determines in relation to a body is its position at a given instant. The world has ascribed to it too a high rank among causes, and allowed it too wide a range in the production of phenomena.

"The belief in the attractive force of matter is not only the foundation of the structure of our present philosophy, but it places every stone of the edifice, and superintends even its finish and its ornament. The mind has no occasion to exert itself further. By gravitation is explained the act of drawing the first

nourishment, and the last expiring breath ; the child totters under it in its first attempts to walk, and old age resists it with its staff. We see only this force of senseless matter when the pendulum swings, when the stone falls, when the vessel floats, when the vapor rises, when the clouds hang heavy over our heads. We trace its effect in the descending rain, in the rushing of the mountain brook, in the flow of rivers, in the swell of the tides, in the outline of continents, in the shape of the earth, in the form of her orbit, in the rush of the solar system through space. We imagine even that by the whirling of 'star-dust' new worlds are gradually added to the realm under the sway of the attractive power of inert matter ! " — p. 223.

The principle of gravitation is objectionable in philosophy, because it places the motion of a body under the control of every other body but itself. It is objectionable in fact, because it cannot be applied to the minute.

Finally, the law of gravitation has held up its head so long and so proudly only from the support of a peculiar kind of mathematics, which must stand or fall with it ; and, with this unnatural aid, it is wholly incompetent to explain the principal classes of phenomena to which it is applied, and is felt and confessed to be so by competent judges. Gravitation is not sufficient to account for the free fall of bodies, for their motion down an inclined plane, for the vibration of the pendulum, for the buoyancy of bodies, or for the tides. The elevation of mercury in the tube of a barometer, the boiling of water at various temperatures according to the atmospheric pressure, the working of the pump, the playing of the siphon, which are ordinarily referred to the influence of gravitation, cannot be explained, even if we adopt the supposition, so improbable in itself, that gravity exists and that the atmosphere has weight. But it is in astronomy, the pride of science, where she imagines herself to have achieved her most brilliant triumphs, that the law of gravitation fails most signally.

Such are the length and breadth, the height and depth, of the failures and deficiencies of that principle of gravitation which gave immortal renown to Newton, its first clear expounder, and which has been the guiding star of science since his time. Are we to believe, then, that modern science has not been guided faithfully and straight forward by a true light of heaven, but distracted,

perplexed, and bewildered by the dim phosphorescence of the innumerable atoms which it studies?

We will not stop at present to discuss the general and philosophical objections to the Newtonian law, but proceed at once to consider the alleged cases of failure. It will be in season to examine the general character of this scientific dogma, when it shall appear that, if adopted, it can explain satisfactorily the phenomena. We begin with the assertion, that not one of the pretended cases of failure which the writer has adduced will stand the breath of a single critical question. Some acquire a plausibility only when we have overthrown the law of inertia, and other well-established principles of mechanical philosophy. The statement of others is their best refutation to the mind of the intelligent reader. Many of these cases are superficial in the extreme; they are simply puerile and ridiculous; and all betray a want of patient preparation for the task in which the author has so blindly and so precipitately engaged. So far is the law of gravitation from being the lame and impotent invention which he represents, that it is, to a degree far beyond all other scientific devices, marvellously, prophetically, we had almost said miraculously, suited to reconcile the facts known to its discoverer with others not ascertained for nearly two centuries afterwards.

We turn first to the eighty-eighth page of the *Outlines*, where the author asks, —

“In a scale-beam balanced by two equal weights, how could oscillation take place under the law of gravitation? Yet if you give one of these weights an impulse, they will oscillate, — oscillate for ever in a vacuum without friction. Gravitation has no power to give alternate motion, — attracting both weights with equal force, it cannot first make one heavier and then the other. If both were held with equal strength, it would be absolutely impossible for this vibration to take place; there is an absence of all cause, or tendency, or capacity for oscillation.” — pp. 88, 89.

The writer has neglected to take account of the weight of the scale-beam; which, as it is supported, not through the centre of gravity, but through a point situated above that centre, will weigh more, when disturbed, on the elevated than on the depressed side. Thus the scale-beam oscillates, carrying the weights with it, on the same principle which regulates the vibrations of a common pendu-

lum. But we must go a step farther. For the vibration of the pendulum is another stumbling-block to our author. He asks :—

“How can this equal rise and fall of the pendulum be explained on the theory of gravitation? Where is the reference to the centre of attraction,—where the *gravitating* power? How is it that the power drawing to the earth draws and repels equally? The rise is unquestionably a continuation of the same motion as the fall, proving that the force has no more reference to a downward than to an upward attraction.”—pp. 86, 87.

The pendulum falls from gravity, and ascends again from the momentum acquired in falling. We have a similar case in the balance-wheel of the watch, which swings to the place of equilibrium from the force of the hair-spring, and then beyond it from the momentum of rotation. This explanation involves the idea of inertia, about which the mind of the writer does not appear to be clear. We therefore ask him, If the attraction of the earth cannot explain the motion of the pendulum, how is it that a compass-needle, which points to a sphere of iron, will, when disturbed from this steadfast position, oscillate backward and forward in a horizontal plane, and thus come tremblingly into its true place again?

We will next follow our author into the domain of hydrostatics, where he finds it very difficult to keep his head above the water. He is at a loss to explain the buoyancy of bodies by the action of gravitation. How can the rise of a balloon in air, or of a cork in water, be caused by a force which urges matter downward, and never upward? It is to be observed, in the first place, that, although the lighter body, as the balloon or the cork, ascends, the heavier body, such as the air or the water, is sinking. It is as exact to say that the heavier body is falling around the lighter, as that the lighter body is rising in the heavier medium. And, in fact, the lighter body is pressed up by the descent of the heavier. It does not rise from its own gravitation, but it is displaced by the surpassing specific gravity of the medium in which it is situated. Our author continues thus: If fluids press equally in all directions, they will not move a body immersed therein up or down, to the right or to the left. It ought to remain stationary, as if it were held between

springs of equal pressure. Here he overlooks the critical circumstance. The pressure of fluids is the same in all directions, under similar conditions. But the pressure in any direction is proportional to the depth of the surface exposed to it below the level of the liquid. This depth is greater for the under surface of a body which is pressed upward, than for the upper surface which is pressed downward. This excess of upward pressure gives the buoyancy. The two cardinal doctrines of fluid pressure,—viz. that fluids press equally in all directions, and that the pressure is proportional to the height of the pressing column,—each of which can be established by simple experiment, furnish ample resources for explaining all hydrostatic phenomena. If our author cannot get along with one exclusively, it is his own fault that he has neglected the other. Let him not make the law of Newton responsible for his own carelessness. Those who cherish the law of gravitation never asserted or imagined that fluids press equally in all directions at different depths; they say, and they can prove, that fluids exert a pressure in all directions proportional to the depth. Hence, they do not have our author's difficulty in understanding why the water of a dam curves more quickly at the surface than below, or why a jet spouts with more force from a low aperture than from a high one.

This anti-Newtonian theorist selects a case in which the quantity of water above a body immersed in it is greater than the quantity of the same fluid below the body; and also another case in which the water which is supposed to sustain a body weighs less than the body itself which is sustained; and he asks, with a sort of triumph, How can the law of gravitation allow such violations of its simplest precepts? This objection sounds plausible, and, if it related to solids exclusively, it would be unanswerable. But these cases never occur with solid bodies. The critic forgets that water is a fluid; that the pressure of fluids, even when caused by gravitation and exerted in a downward direction, is independent of the weight of the fluid; that it depends on the height of the liquid column and the area of the surface to which the pressure is communicated, and that, if these elements remain constant, the pressure is the same, whether the column be as fine as a pipe-stem or as broad as the Pacific Ocean.

These laws control the action of gases, vapors, and liquids. They originate in the peculiar constitution of fluids, which modify and multiply any force which is applied to them, as solid bodies will do when arranged after the model of one of the mechanical powers. They are confirmed by experiments in which gravitation takes no part, where muscular or some other power is used, and where all the motions are performed in a horizontal plane, so that our author's theory of the spare force of descent, if it were ever any thing but a chimera, would be wholly inapplicable here. But he has appealed to experiment, and unto experiment let him go. He says :—

“ It has also been deduced from this idea, that, if any fluid in a cylinder be pressed by a piston, the force which moves the piston bears with the same power on every part of the surface of the cylinder. For instance, if the area of the piston is one foot, and it is acted upon with a force of one hundred pounds, and the cylinder has an area of eight feet, the one hundred pounds of pressure would be multiplied into eight hundred pounds, to give the one hundred pounds pressure to each foot of the cylinder. But it is not so. The one hundred pounds force is not in the least increased by the size of the cylinder, and is equally distributed over the whole surface. The mistake has arisen from the fact, that, if the cylinder is opened at any part, there will the whole force concentrate itself ; and because it can always be brought to any one point, it has been supposed that it acts with its whole force at every point at once. The molecular force is converted into progressive motion only where it acts against that which is movable ; it exerts itself where there is room for motion. When confined, the force is equally distributed throughout the containing vessel ; when suffered to escape, its whole strength is transferred to the place where there is room for motion. Tap the cylinder at any part of its surface, and thence the fluid issues with the force which theory assigns. Let the boiler of a steam-engine burst, and at the rent will issue the force which theory has made present at every part.” — pp. 160, 161.

Suppose that we make a number of apertures in the cylinder, and keep them all open at the same time. We find as much force displayed at each, now, as when all the rest were shut. Can our objector tell us how the whole force is able to concentrate in so many different places at the same instant, or why, when the aperture at a single spot is larger than the area of the piston, the force which rallies there is greater than the whole force ?

Thus we have been gradually prepared for the monstrous statement, that fluids at rest exert no pressure whatever. "A ship has no weight on the water; she does not bear upon it; the hand placed between her and the water would not be in the least compressed. She is not attracted downward by gravitation, nor is the water attracted upward against her." And again we read:—

"We will bring the pressure of water to an infallible test, that of our sense of touch,—our honest perceptions, which favor no theory whatever. Immerse the hand in water; in the act of immersion pressure is felt, for the water is moved by the introduction of the hand, but when it is at rest in the water not the least pressure is experienced. Place the hand near a small orifice from which water is issuing, and pressure will be felt because there is a motion of the water. Stop the orifice with the palm of the hand, and there is no pressure; for the water has ceased to flow."—p. 156.

The force of pressure is one thing, and the force of percussion is a very different thing. It does not require the same strength to hold a cannon-ball that would be wanted to stop it. But these pretended facts are not facts; nature abhors them. Our author imagines his results, for he could never have arrived at them after a delicate trial. We do not dispute the competency of the senses to decide in such matters; but we should like to take our choice among the different senses. We have never heard that the sense of touch had claims to infallibility higher than those possessed by that masterpiece of divine skill, the human eye. We know there was a time when the king's foot was considered an accurate national standard of weight. But science has grown more scrupulous and circumspect. Science will not admit that fluids at rest exert no pressure until the experiment is repeated once more, and all the senses are invited to be present and to judge, instead of leaving the decision in the hands of the coarsest of all the senses, that of touch. If fluids at rest exert no pressure, why will not an empty balloon remain distended, and why are hollow metallic vessels, of several inches in thickness, crushed by the pressure of the ocean when they are sunk in deep soundings?

Let us next review the statements of this author in regard to the mechanical arrangements of the atmosphere.

He says there is no proof that the density of the air increases with the elevation, and if it does, the fact is inexplicable by gravitation and the received laws of fluid pressure. If a cubic foot of air presses equally in all directions, up as well as down, the density of all the atmospheric strata must be the same. If from any cause the lower strata were denser than the upper, there would be a vertical trade-wind blowing perpetually upward. If the coldest strata are the densest, then the upper strata must be denser than the lower. With all the confusion of thought in applying principles and all the ignorance of facts which these remarks betray, the writer shows that the dogmatism of scepticism outruns the dogmatism of science, against which he protests so loudly. He says with emphasis: —

“ We wish to express this idea distinctly. If the air be more dense at the surface of the earth than a mile above it, the increase of density does not arise from gravitation; and, if there is a difference of density at different levels, the barometer cannot indicate it.” — p. 120.

The distance of the upper layers of the atmosphere from the earth's centre of gravity surpasses the distance of the lower layers by too insignificant a fraction to make any difference in our planet's attraction upon them, according to Newton's laws of attraction. We agree entirely to this. But our author reasons upon the subject as if the air were solid, and not a fluid. The density of a stratum of air is measured by the pressure to which it is subjected; and the pressure is occasioned, not by its own gravitating tendency, but by the combined gravitations of all the superincumbent strata. Unless it can be proved that the upper portions of the atmosphere have as much air above them as the lower, it must be admitted that the attraction of the earth, if exerted upon a compressible atmosphere, will make the lower parts more compact than the upper parts.

If we introduce the testimony of the barometer to prove both the gravitation and the stratification of the atmosphere, we are told that this witness knows nothing about the question. The mercurial column is not sustained by the pressure of the air. That is a vulgar prejudice, which men of science do not disturb, though they must know better. It is true, Pascal believed in it, but

Pascal lived some hundred years ago. The world has adopted his opinion, but the world always runs after great men. If, says our author, the barometer *measures* any thing, it must be the weight of the air over the whole cistern. Why should it select a column of atmosphere no larger than the opening of the tube, and attend to that exclusively? We answer, because the air is a fluid. If the force of the hand were applied to the surface of the mercury in the cistern, it would be treated in the same style. Again, it is asked why, if a pound of mercury is added to the cistern, an additional pound of mercury does not rise up into the tube; and again we answer, because mercury is a fluid. Why, we are asked once more, does it take as much strength to lift a filled barometrical tube as to lift the tube and mercury in any other shape? If the atmosphere holds up the mercury, why is it not sufficient if we hold up the glass simply? We answer, that there is the same vacuum under the top of the glass tube as over the mercury; that the tube has lost the upward atmospheric pressure which the mercury has gained; and the whole pressure upward upon both together is the same in the barometrical arrangement as in any other. The writer has not picked the slightest flaw in the theory of the atmosphere and of the mercurial barometer. The aneroid barometer confirms the testimony of the common barometer. The air may be examined at different elevations, and its variable density proved by weighing equal volumes in a delicate balance. The barometer, pump, and siphon all operate in consequence of atmospheric pressure, and cease to operate when the experiment is made inside of an exhausted receiver. In the case of the pump we are asked, How can it be said that the pressure of the air is the elevating agent, when, for every pound of water raised, the force necessary to raise a pound is required? The pressure of the air is the immediate cause of the rise of the water. But before it is effectual, the air must be removed from the top of the pipe, and sustained by the power applied to the pump-handle. It requires the same force to lift the piston with a vacuum underneath, as presses against the water in the well to fill the vacuum again. No one ~~ever~~ pretended that power was gained by the pump any more than by the simple pulley. We prize it, like other machines, for its convenience.

Let us cross-examine a few more of the witnesses which have been summoned to prove that the atmosphere has no gravity. The writer says, if you raise a piston which fits air-tight into a cylinder, it is said to be pressed back again by the atmosphere. But it cannot be so. The pressure is not constant; its amount varies with the length of the stroke. If the atmosphere presses, it must have greater stability of pressure than this experiment indicates. How many of the readers of this Examiner need be told, that the rarefaction of the air in the cylinder increases with the length of the stroke, and that the atmospheric pressure is occasioned by the difference of density between the air on the inside and the outside atmosphere? On page 180, the writer refers to the familiar experiment with the inverted wine-glass. He finds that water is sustained in it even when seven eighths of the inside is full of air. And water might be sustained in it even if all but a thousandth of the space contained air. When it is said that the experiment does not succeed with air within, we must understand air of ordinary density. But the air in the inside is not of ordinary density. Here the facts were correct, but the analysis was imperfect. On page 126 and the top of 127 the reasons might be good, if the statements were not wrong in fact. It would be difficult to make the law of gravitation, or any other law of nature, account for the alleged facts which we find in this book. No man who ever made an experiment has found such results as those to which we have just referred.

We will now follow our author into another province, and see how strong a case he makes out against the astronomers. We have only time to notice one objection. When the astronomer wishes to enthrone the Newtonian law over the solar system, he assigns to the sun, moon, and planets a mass exactly suited to the gravitating work which each is expected to perform. If this mass does not correspond with the bulk of the body, as ascertained by measurement, no matter; he can adjust the difference by the charm of a specific density. He selects a mass which accommodates the law of gravitation, and, as soon as it fails to do so, he drops it and takes another. The law of gravitation cannot be proved in this way. Otherwise, any law, whether true or false,

might just as well be proved. We would observe, upon this charge, that astronomers proceed in their profession in the same way that other men do in familiar affairs. If they wish to know how large a planet is, they measure it. If they wish to know how heavy it is, they weigh it. If volume and weight rarely correspond in the material of the earth, why should we expect them to be identical in the matter of the rest of the solar system? This disproportion between bulk and mass is no objection to Newton's law. We allow, however, that the law is not yet proved. But if it shall appear that the mass originally selected to suit a single purpose is wonderfully adapted to every other astronomical crisis; that the same mass which gives the sun full control over the earth is sufficient for his share in the tides; that the same mass which permits Jupiter to keep one of his satellites in its orbit will answer for the motions of the three others, and likewise for his disturbance of Saturn and the comets; that the mass by which Mercury and Venus disturb a single comet is the key to all their other attractions,—then the law of gravitation is no longer assumed, but demonstrated. The mass of the planets is found by weighing them. And they have been weighed, not in a single balance, but in manifold ways, by scales constructed on various principles; and although the beam has been watched by the sober gaze of the severest science, they have never yet been found wanting. But let us see to what extent astronomers have tampered with the masses of the planets. Jupiter, next to the sun, is the most influential member of the solar system. His mass is, therefore, of great moment. Now the mass of Jupiter has not been changed more than two per cent. since the time of Newton. The determination of Jupiter's mass by Bessel, in 1841, did not differ more than a tenth of one per cent. from the mass which Airy had recently ascribed to the same planet. And the mass of Airy varied only one third of one per cent. from that which Encke gave to Jupiter in 1826. The mass which Newton used for Saturn, in the *Principia*, differs by 16 per cent. from the recent determination of Bessel. Lagrange, in 1782, diminished the mass which Newton used by ten per cent. Laplace diminished it again by a minute quantity. Bouvard, again, by less than five per cent. Bessel increased

it by a third of one per cent., and afterwards diminished it by one twenty-fifth of one per cent. The changes, therefore, are not arbitrary, but have rapidly approximated to the true value. The same mass continues to be used for Mars which Burckhardt assigned to this planet in 1816, and his assignment varied by only five per cent. from that of Delambre. The same constancy has been preserved in the mass of Venus. Lamont, who was the first to observe the satellites of Uranus with one of the capital Munich refractors, altered at once the mass of that planet, adopted by Laplace and Bouvard, by one third; but it is now beyond the reach of any other considerable mutations. The mass of Neptune which Peirce obtained from the observations on its satellite is also the mass which most satisfactorily accounts for its interference with the motions of its neighbor, Uranus. Moreover, if the masses now used by astronomers are taken, so far from requiring a fanciful density in each particular planet, they leave Mercury, Venus, Earth, and Mars of one density, and the other planets also of the same density, though only one quarter as great as that of the first set.

Our author has a great fancy for analogies and numerical relations. He is dissatisfied with the importance which the existing system of astronomy attaches to masses. For he is not able to detect any simple relation between the density of the planets and their position in the solar system; the densities skip from one extreme to the other, without observing any law. But the diameters of the planets are more regular. They are also more truthful. You cannot trifle with them. Does he mean to say that the diameters of the planets have not experienced as great fluctuations in their determined values, from successive refinements in the construction of instruments and improved methods of observation, as the masses have suffered from the same causes, and also from the introduction of more exact calculation? Are the diameters as well measured at the present moment as the masses are calculated? And do they not skip and jump about in their relative magnitudes quite as freakishly, from one end of the solar system to the other, — from Mercury to Mars, and then back again to Venus? We have no great confidence in these numerical rela-

tions, which the author has collected from various quarters to illustrate this portion of his subject. The harmonies of the universe rarely lie exposed in this way on the surface. Unless these relations are precise in their details, and sweeping in their range, as the theory of definite proportions in chemistry, or the third law of Kepler in astronomy, they promise little aid or instruction to man. The law of Bode has been of doubtful service to astronomy. Kepler delighted like a child in ringing the changes upon the numerical elements of nature, but how few of his analogies are valued, or even remembered. Kirkwood's recent analogy, which supposes that the squares of the periods of rotation of the planets are inversely as the cubes of their spheres of attraction, awakening in the memory the grandest symphony which Kepler ever sounded upon his heavenly chords, promises much more than any of those to which our author draws notice. Kirkwood's law pays respect to the masses, and not to the diameters. Though it promises well, it has much to perform. It still waits to be confirmed, and when confirmed, to let fall its physical import.

But we must break from this topic to glance at the stale objections which the same writer brings against the present theory of the tides. He asserts that the law of gravitation is utterly incapable of explaining these oceanic phenomena. Let us heed his argument. The moon cannot raise the waters from the earth; for the moon is smaller and farther from these waters than our own planet; therefore the moon's attraction to lift the waters must be less than the earth's attraction to hold on to them. But suppose that the water should begin to rise, it would never cease to rise till it touched the moon, as the moon's attraction would be on the increase, and the earth's attraction on the decrease. Still further, as the sun's attraction on the earth exceeds the moon's, the solar tide should be higher than the lunar tide, and the mean rise and fall of the water should conform more nearly to the sun's motions than to those of the moon.

"Gravitation, if we admit all that is claimed for it, will not cover the phenomena of the tides. Imagine a miniature world, with its dry land, its lofty mountains, its wide-spread oceans, and its enveloping atmosphere, placed within the sphere of the earth's attraction. How would the earth act upon this little

world? She would draw it towards herself, with a force operating equally on its every atom. If it moved towards the earth through a resisting medium, the more solid parts might advance more rapidly than the rarer, — the granite rocks than the thin air; if it moved through void space, every part would advance with equal rapidity, all retaining the same relative position.

“So if the earth is attracted to the moon, every atom is attracted; and, if there is any motion induced, every part moves equally. Indeed, astronomers assert that ‘the earth is constantly falling to the moon, being continually drawn by it out of its path, the nearer parts more, and the remoter less so than the central.’ But the attraction of all the particles of the earth for each other, which gives it its form, which moulds it into ‘this goodly ball,’ is too great for the moon to separate its elements, to tear it apart as it were, — to elongate its mass so as to cause the tidal flow. If the moon attracts the earth at all, it must be as a whole, — as one mass. She cannot have greater power over one portion than over another of the earth’s material. The theory of gravitation does not give the moon elective attraction, by which she is enabled to move the waters of the ocean, yet leave untouched the waters of the great lakes, or to lift the ocean and leave unmoved the bed on which it rests. And if she can lift water away from its own centre of attraction, why does she not raise the sands of the desert, the atmosphere, vapor, and the descending rain? So evident is this idea, that a scientific man in France, after writing a treatise on the tides in accordance with the present theory, remarked, how strange it is that the moon should possess this power over the waters of the ocean, when we know she cannot draw towards herself a feather floating above them!” — pp. 232, 233.

After the imperfect knowledge which the writer has displayed of the nature of fluidity, we are not surprised at his notion of the tides, bald and superficial as it is. These views, in a much more elaborate form, and with a great parade of figures, were published several years ago, by Thomas Kerigan, in a work the title of which we have already given. The author — who was a Fellow of the Royal Society of London, and who boasts of having served his country in the royal navy for thirty-eight years, and of having seen tides rise and fall in every latitude that the sun shines on, more in number than the mathematicians have ever calculated — indulges in the usual self-congratulations of the anti-Newtonian dissenters, and concludes thus: —

"I am quite satisfied that the schoolboys of another generation will *laugh* at the idea of the attractive power of the moon being the principal cause of the tides of the ocean. And they will be surprised to find that men should be so wedded to ancient prejudices, and so impervious to the admission of plain truths, — near the middle of the nineteenth century! — as not to clearly perceive the gross absurdities of our present *tidal theory*; for, instead of the reputed attractive power of the moon being three times greater than that of the sun, the intensity of the sun's attraction, at its mean distance of ninety-five millions of miles from the earth, is actually 157 times greater than that of the moon, at her comparatively short distance of 238 thousand miles. . . . Thus it is evident that the *Tidal Theory*, which has been so long in existence, and which is believed in by all the world, is a failure from Alpha unto Omega, for it will not bear the test of an impartial mathematical investigation." — p. 15.

It will not be difficult to point out the flaw in both these writers. They mistake the phenomenon. The water never rises from the earth in the sense in which a particle of sand or a feather must be lifted up, if it should rise. The earth never relaxes its hold upon the water; the water never leaves our planet. And this for the simple reason, that the earth attracts more than the moon. The moon cannot nullify the earth's attraction, but she can and does diminish it. She cannot destroy the gravitation of the oceans towards the earth, much less impart an absolute gravitation in an opposite direction, but she can and does weaken their terrestrial gravity. It is not true, as one of the objectors asserts, that, "if the moon attracts the earth at all, it must be as a whole, — as one mass. She cannot have greater power over one portion than over another of the earth's material." Newton never authorized such a law; and if he had, it could not have survived his own generation. Newton says that every particle of matter attracts every other particle of matter with a force which varies inversely as the square of their mutual distance. Unless it can be shown that all parts of the ocean are at equal distances from the moon, we must consent that the moon should attract some portions more than others. We may consider an ocean as consisting of liquid columns, all pointing nearly towards the earth's centre. The unequal attraction of the moon on the unequally distant parts of these columns just underneath her will diminish their mutual gravitation; in other

words, their weight. The attraction of the moon will be, for the same reason, of equal force on the whole length of other columns, situated about 90° distant from the former, so that their terrestrial gravitation is unchanged. The overpowering weight of the last set of columns will press up the first set of columns, as a heavy liquid presses up a light liquid in the arms of an inverted syphon, until the greater height of the lighter makes up for the greater specific gravity of the other. Let it be, therefore, that the attraction of the moon at the earth's surface, so far as it tends to lighten the waters, is only one seventeen-thousandth of terrestrial gravity. A diminution in their weight to this minute extent requires that the column should increase in length by more than two feet to balance other columns which suffer no such loss. It is not, therefore, Newton's law which is incapable of accounting for the tides, but another law of which Newton never dreamed, and which is only written in the *Principia* of the men who have demonstrated its barrenness. It is this spurious law which leads them to expect a greater tide from the sun than from the moon; but the true law of Newton justifies no such deduction. The author of the *Outlines* complains again of the lagging of the tides:—

“But the property of *vis inertiae*, as we have said, is convenient when stubborn facts will not bow to the asserted theory. Thus the happening of spring tides two or three days after the full or new moon can be accounted for,—the tidal wave continuing to rise after the cause of its rise is weakened, from the habit which the water has acquired of increasing its flow.”—pp. 230, 231.

The writer may sneer to his heart's content at the expression “*vis inertiae*.” We have no dispute about words. The language is technical, and perhaps objectionable. The idea he does not deny; he assumes it, and builds upon it in his own theory. His theory would crumble in an instant without it. His own words, in explaining the same phenomenon of the tides, are: “The extreme point of all connected phenomena thus advances beyond the exciting cause.” And again: “There can be in the economy of nature no sudden suspension of the motion of large masses.”

We will now attend to the system of mechanical phi-

losophy which is recommended to us in place of the old system. It is, as nearly as we can gather it from the ill-arranged and often obscure Outlines of its author, as follows. Matter is inert, "without power to move or tendency to move. It obeys the law of force, and if absolutely at rest it is without force; nothing can be affirmed of it but that it is, — the fact that it exists in space." Force is independent of matter. Force originates with God. Wherever force is, it acts. When force is present in matter which it cannot move, it is transferred to matter which it can move. The amount of force required to produce a given velocity depends on the specific character of the matter moved. A body in motion must continue in uniform motion, unless disturbed by the action of an objective cause. It must continue in motion, *but not necessarily in a straight line*. Motion is in proportion to the impelling force; *but not necessarily in the direction in which the force acts*. Force acts independently of direction. On its transfer from body to body, the direction of the motion may alter *without any loss of force*. The last body will move in any direction in which it is free to move. If the body which obstructs force cannot move at all, then the impinging body rebounds. This change in the direction of the motion on its transfer from one body to another is illustrated by the wind-mill, the waves, the billiard-ball, neither of which always moves in the direction of the body which sets it in motion. As force is independent of direction, there is no reality in the assumed centrifugal force of the old mechanical philosophy.

"Centrifugal force, too, is often illustrated by the necessity which a man finds, in running round a small circle, of leaning inwards toward the centre, 'to counteract the centrifugal force.' But we will quote a contrary opinion: 'Let any man move in a circular or elliptical line described or marked out to him, and he will find no tendency in himself either to the centre or from the centre. If he attempt the motion with great velocity, or if he do it carelessly and inattentively, he may go out of the line either from the centre or towards it; but this is to be ascribed, not to the nature of the motion, but to our infirmity, or perhaps to the animal form; which is more fitted for progressive motion in a right line than for any kind of curvilinear motion.' Thus says Lord Monboddo, and proves that philosophers are not agreed

among themselves concerning a fact, which is assumed as a 'standard example' of their mechanical doctrines. However it may be with a man running round in a circle, we feel quite sure that a revolving sphere would not have to lean inward to prevent its falling outward, or to lean outward to prevent its falling inward." — pp. 77, 78.

All bodies are moving with the earth round its axis and about the sun. As a body can occupy but one point of space at the same instant, it can only move in one direction at a time. Hence any relative motion it may have is only a modification of the grand rotary and orbital motion which it shares in common with the other parts of the solar system. The force present in a body decides the size of its orbit. A change of force enlarges or diminishes the orbit. The degree of force required to change the orbit is not measured by the change in the circumference, but in the area, of the orbit.

"The revolution of the heavenly bodies is accompanied by rotation on their axis. This connection of the primary with the secondary movement arises from another law of force, — from another property of the power which imparts motion. The two movements appear to have an opposite character. In the one, as we have seen, velocity increases by the diminution of the orbit; in the other, velocity becomes lessened as the rotating matter approaches the centre of rotation." — p. 18.

Follow next the theory into the every-day work of nature, and see how it conducts there. When a stone begins to fall, it enters on a lower level of rotation; the area of its new orbit of rotation is diminished, and hence part of the present force is released from the labor of carrying it round so fast. Thus arises spare force of descent. This spare force, being ready for any sort of work, is employed in accelerating the fall, so that the force is never idle for an instant. When the stone reaches the earth, its spare force is transferred to the earth. "The spare force of descent will be measured by the degree of descent. Hence the spare force of falling bodies is measured by the square of the time of descent, equal times giving equal distances of descent"; and, elsewhere, "The force received for elevation, the force given out by depression, is measured in one case by the increase, in the other by the decrease, of the area of the circle of rota-

tion." For the same reason the pendulum moves, and as the force required to move it is proportional to the area of the circle in which it moves, its velocity increases as its length diminishes! It requires force to lift a lump of lead, because it comes to a higher level of rotation. In the case of buoyancy, we do not dare to depart from the author's own words.

"The floating body, then, does not remain suspended from the weight of the water in which it floats. There is no tendency in the water to crowd it out of its place, nor any to hold it in its place. A floating body has no tendency to sink or to rise. It is not attracted downwards. It rests self-poised. It preserves its level because it has the rotative force of its level; it floats because the rotative energy is equally diffused through itself and the water." — p. 164.

The waves of the sea rise because the waters have abstracted from the winds force enough for a higher level of rotation. Water ascends in the pump, because the force applied at the handle is communicated to the water below, and this addition to its present force brings it to a higher level of rotation. Water boils more easily at great elevations because it possesses greater force of rotation. When a vertical column is rotating, the upper end moves faster than the lower end. Hence there is an unequal diffusion of present force in the column; an inequality which is proportional to the length of the column, the density of the material, and the mean velocity of rotation. In solids bound together by cohesion there is no limit to the possible amount of inequality. "But from the law of the diffusion of force there is a normal difference of diffusion to which all fluid bodies conform, when free to adjust their volume in relation to it." This is the origin of what this author calls the *limit of extension* in fluids. This limit is perceived only in fluids so placed that they can change their length of liquid column. This is the case with the mercury in the barometer. It keeps the normal inequality the same under every force of rotation, by extending or lessening the distance between the two surfaces. It rotates with a column which corresponds in length to the force of rotation. If the barometer is raised above the earth's surface where the velocity of rotation is increased, the length of the mercurial column diminishes, and thus maintains a con-

stant normal inequality. Hence the barometer by its rise and fall indicates directly the level at which it is situated. Its oscillations at the same level are occasioned by the elevation and subsidence of the earth's crust. There are supposed to be, not only irregular heavings of the earth's surface, but periodical and compensatory oscillations, excited by the variable distribution of the force with which the earth moves in her orbit. These enlarge the earth in one diameter and contract it in the rectangular diameter. "The elliptical form of the earth's circumference is dependent on her position, as being nearer to, or farther from, the centre of revolution; and the shrinking or expansion is regularly propagated by her rotation." When any portion of the earth's crust rises, more force for rotation is needed; when it falls, there is spare force. In the first case, the moisture of the air is taxed for this force, and is condensed; in the second case, the supernumerary force is employed in the conversion of liquid to vapor.

One part of the earth contracting while another is swelling, there is a transfer of force from the former to the latter, and force in this current form produces the changes witnessed in the magnetic element. Moreover, that part of the earth nearest the centre of revolution moves in an orbit round the sun 8,000 miles less in *radius* than the outer part. Hence it requires less force of revolution than the outside. As the earth's rotation carries every meridian once a day through both of these extreme positions, a constant transfer of *spare force of revolution* is maintained. This is the motive power of the tides. The waters do not rise *on* the earth, but with the earth.

"Before we leave this chapter, which we have devoted to the subject of the tides, we would once again recur to the opinion we expressed, that there are in all oscillatory movements two conditions of the undulation, — one, the impulse or cause; the other, the equipoise or balance, to receive the impulse. Thus, in the oscillations of the great tidal waves, we have for the impulse the transferable force of the earth's revolution in her orbit, passing from point to point in self-adjusting distribution, according as successively one hemisphere may require more, and the other hemisphere less, while the act of oscillation is the reception and transfer by the crest and valley of the wave of the rotary force of the world; the one receiving the more as it rises, the other imparting the more as it falls. Here, then, is a meeting point of these

two forces of rotation and revolution ; here they join in one movement ; here is the place of intermingling, of intercommunication, so that the excess of the one can supply the lack of the other, and a perfect equipoise be established for the preservation of the harmony of these great movements." — pp. 249, 250.

And so the writer goes on to apply his theory to heat, light, magnetism, galvanism, capillarity, friction, trade-winds, storms, the variations of the compass, to the efficacy of cements, to the *vena contracta* of flowing liquids, and also to reputed facts of doubtful reputation. But we cannot follow him any farther into details.

Such is the make-shift contrivance which we are invited to entertain after we have thrown away all our present science, and are left to seek for ourselves. Are we prepared to take this step? Are we ready for the question? There are no doubt difficulties besetting every scientific theory, and none are older or more entangled than those which have disturbed the doctrine of force. But the writer has not broken the slumber of one of these forgotten controversies. He has made his attack upon the clearest and strongest conclusions of science, and they will stand the more firmly for his assault. He has brought forward no fact, he has made no remark, which ought to create distrust in our adopted system of mechanical philosophy. But he has appealed from the judgment of scientific men to those who are no fit judges in the matter, and he will doubtless find among them a few sympathizing and admiring disciples. No one, certainly, should be reproached, if, from any cause, he is unable to look at facts in the same light as other men. But he should have some respect for carefully considered opinions, if he cannot adopt them ; and should feel some distrust in his own till they have been weighed with equal care. Newton did not publish his *Principia* until he had pondered upon the subject for twenty years. And do we expect his views, after standing for nearly two centuries, to be overturned by the crudities of an hour? When Newton and his system are tried and condemned, it will be by his peers, and not by men who assail doctrines as his which he never taught, and confront his real system by assumed facts which are absurdly contrary to observation.

We shall content ourselves with a few remarks on the

new system of which we have attempted to give an abstract. It is vague and imaginative, loose and general. If philosophically true, it could not in its present form serve the purpose of a scientific theory. It is a philosophical dream. This system is incapable of quantitative analysis. It does not admit of being brought before the phenomena of nature and compared minutely with them. It makes use of those false analogies which are so dangerous in science, and which attract in order to betray; numerical coincidences are exalted into nature's sweetest harmonies, and the jingle of a few figures is crowned with the glory of the highest geometry. Of what possible significance is it in nature's harmonies, that the ratio of the diameter and the circumference of a circle is one to three nearly, and that the expansion of bodies lineally and in volume is also nearly as one to three? Suppose the highest waves are thirty feet and the highest tides a multiple of thirty feet, what does nature care for that?

The new system cannot interpret the most notorious phenomena of nature even in a general manner. The whimsical device of a spare force of descent must be now arraigned; and it must be asked of it to explain minutely, or even generally, all those cases of pressure and motion which are usually resolved into that antiquated prejudice, the earth's attraction. A moment's reflection will suggest to any one the very comprehensive character of this class of phenomena. Here, then, is the touchstone of the new views. If they succeed here, they may succeed everywhere. If they fail here, they will utterly fail. Now we say that the new theory is defective, root and branch, in all these applications. The phenomena of the weight and fall of bodies are exhibited in all latitudes, and with a difference of intensity that indicates a slight increase in the force which instigates them as we move from the equator towards either pole. At the pole, the force of rotation is nothing, and if a stone fall at that place, it can supply no spare force of rotation, however great the fall. According to this strange theory, there should be neither weight nor fall to bodies at the poles, where, in fact, they weigh the most and fall the fastest. And as we pass from the equator to the poles, the spare force of descent by the same amount of descent diminishes in a compound ratio. The spare force which is

released from rotation is measured by the diminution in the area of the orbits of rotation. The orbits of rotation diminish as we leave the equator. It is obvious, therefore, that a ring of a foot in diameter cut from a small orbit will diminish its area less than if cut from a large circle. Besides, the descent of a foot will take away a foot from the radius of rotation only at the equator. As we go from the equator, the breadth of the ring cut from the circle of rotation, and the size of the circle of rotation from which it is taken, both diminish, and hence the spare force of rotation diminishes by a compound ratio. The statement to the contrary on page 21 of Mr. Coues's work is geometrically false. So far are the two causes which are mentioned from balancing one another, that they aggravate each other, and make the case still more unfavorable to the spurious theory.

But there is a radical defect in the proposed theory which vitiates it at the poles, the equator, and everywhere else. It can give no reply to the following queries:—What makes a body fall in the first instance? Whence originates this fall of the first foot, which yields spare force of descent for additional velocity? Suppose a pendulum to be raised out of its place of equilibrium under the point of suspension, why should it begin to fall? Why does it not remain where it is left? Why should not a ball lifted into the air there stand for ever self-poised? It does not begin to fall for want of sufficient force to rotate at this higher level, because it acquired it from the effort expended in lifting it. Gravitation answers these questions, and all the other questions which have been propounded, satisfactorily; but its rival cannot utter a syllable. "Masses and fragments of the earth fall; when unsupported, they take a lower level of rotation, and as they fall yield up to other bodies the force of their former superior level." But why fall, even if unsupported? What need of a support, except against gravity, whose existence is ignored? If they fall because they have not force adequate to the present orbit, how did they lose it? And if they have lost it, how can they give up spare force, since they are falling from a deficiency of force? The author distinctly asserts that bodies at rest have no weight. The parts of a mountain four thousand feet high are no more pressed at the base than

at the top. "There is no weight except on condition that the mountain descends to a level of rotation." Every one knows this to be contradicted by facts. It takes muscular force, not merely to lift a body to a higher level of rotation, but also to hold it at the same level; a degree of strength which soon exhausts the most powerful arm. Everybody knows that the assumption of no pressure in bodies at rest is palpably incorrect. But we will assume it to be true; we will suppose that gravitation is an exploded dogma, and we ask again, Why does a body begin to fall? We find no more satisfactory response than this to the inquiry: "The intensity of molecular action, the pulse of nature, the very throb of force, the vibration and oscillation of all things, would account for the fact that the suspended body has motion, has the beginning of its downward course."

But what, after all, is this which we call natural philosophy? There are questions which man has put to himself and put to nature ever since philosophy has had a name among men, but which are as unanswered and as unanswerable now as in the beginning. Is there any substratum to matter, independent of its properties or radiant forces? Is there any limit to its divisibility? Are there any absolute atoms? What is the measure of force? Are all forces identical and convertible? What is the true idea of a natural force? What is the connection between natural and intellectual or moral forces, and in what relation do all these subordinate forces stand to the Almighty, the Creator and Sustainer of things? These are all questions more or less closely allied to natural philosophy. To some it has returned uncertain and conflicting answers, and some have ceased to be asked from despair. Natural philosophy has humbled itself, and is willing to serve as a day-laborer in the physical sciences; and, as its reward, it may hereafter be exalted to a throne from which it can look down on Nature to understand, as it now looks up to her to wonder, admire, and adore. What then may become sight, Science can now entertain only as a matter of faith. In this faith, unless she is blinded by the dust of her own swift, but lowly and earthly career, she will never fail to see behind her own complicated array of ways and means, and her various forces and laws, one

uniform, simple, and sublime plan of operations, whose contriver and upholder is God. If the book under particular review is regarded as a poetic vision of the more perfect age of science, it is not without valuable suggestions. But it is too inaccurate to contribute any thing towards hastening the arrival of that day for which it seems so ardently to aspire. If it make claim to enter the lists as a work on science, and on the most rigid of all the sciences, then it falls under the charge of building upon nothing but assumptions, and erecting a structure which does not illustrate, but contradicts and defies nature. It assumes, without proof, that all the forces of nature are identical and convertible; that force spared from one occupation is equally good for any other; that force is indifferent about the kind of work it performs or the direction in which it acts. All this may be true, as a philosophical principle, and it may also be true, in the same sense, that all matter is fundamentally derived from similar atoms. Nothing, however, is gained to science from the asseveration of these principles, especially as they are not proved, but only assumed. It may also be true, that, in the economy of nature, a certain fund of force has been delegated to take care of a limited quantity of matter, by virtue of which the outward phenomena of the universe are manifested. It is the business of Science, not to assume nor extravagantly to speculate; but to analyze, to compare, to measure, to investigate. Under this condition, the progress of Science is laborious and slow; but if less brilliant, it is more sure. Her path would indeed be more smooth and flowery, if her devotees could retire, with a small stock of materials, to the closet, and there construct, without reference to facts, and perhaps in defiance of facts, such a theory of force as seemed to the mind most simple and natural. Such a science might captivate, but it would not instruct or serve the world.

The human mind from the first has exhibited a proneness to construct rather than to analyze; and in constructing, it has assumed an order of simplicity which does not belong to nature. In this way it has put itself in rivalry with nature, when it should be in harmony with it. In its efforts to produce a correspondence between its own self-prompted conclusions and the un-

yielding teachings of nature, it has retarded by centuries the progress of Science, and, under the pretence of serving her, been her worst foe. On returning from its speculations to the apparently menial work of observing and investigating, it has discovered that nature conforms only to such a degree of simplicity as admits of variety; that, for example, the orbits of the planets are not circles, for this figure admits of no degrees and no varieties; neither are they wholly irregular. The wonderful sections of the cone comprise the richest variety and a very high order of symmetry. Again, the orbits, on the one hand, are not so stable as to produce monotony; on the other, they are not so fluctuating as to create disorder; but by means of oscillations of every magnitude, from those which can be measured by the beating of the heart to others which measure the duration of whole races of men, they manifest the most intense life in the midst of the highest permanency. Likewise, to assume all force to be identical can be of no use, except as a guide to research. What actual progress science has made in generalizing all the physical and chemical forces, appears from a review of the Lectures of Mr. Grove on the Correlation of the Physical Forces.

“The position which I seek to establish in this Essay is, that the various imponderable agencies, or the affections of matter which constitute the main objects of experimental physics, viz. Heat, Light, Electricity, Magnetism, Chemical Affinity, and Motion, are all correlative, or have a reciprocal dependence. That neither, taken abstractedly, can be said to be the essential or proximate cause of the others, but that either may, as a force, produce or be convertible into the other; thus, heat may mediate or immediately produce electricity, electricity may produce heat, and so of the rest.

“The term Force, although used in very different senses by different authors, in its limited sense may be defined as that which produces or resists motion. Although strongly inclined to believe that the five other affections of matter which I have above named are and will ultimately be resolved into modes of motion, it would be going too far, at present, to assume their identity with it. I therefore use the term Force, in reference to them, as meaning that active principle inseparable from matter which induces its various changes.” — pp. 7, 8.

After an able review of the evidence on the subject,

Mr. Grove concludes that, although there are clear indications that a large proportion of physical phenomena are results of different kinds of motion, and that these varieties of motion are excited by the same essential force, modified in manifold ways by the molecular arrangement of the bodies through which it acts, and that a certain amount of one of these kinds of motion is equivalent to fixed quantities of all the rest, still the proof is far from complete. Moreover, this conversion of force into force, even as far as it can be traced, is subject to very peculiar conditions. Before it can be inferred that, in all the operations of nature, the same identical force is in action, producing, according to the shifting circumstances of activity, the various motions which are seen, it must be shown that the conditions for the conversion of one description of force into another exist. Mr. Coues has not taken the trouble to examine these conditions. It is impossible, in the existing state of the sciences, to prove that the periodical and irregular pulsations in the light, heat, electricity, and magnetism which make their displays upon our planet are so intimately associated as to have a common origin, and that they are all the holiday sport of a small fraction of the same force which turns the planets on their axes and wheels them round the sun, and which is spared in one place at one moment, and, after riding on a whirlwind, arming a thunder-cloud, or kindling an aurora, is remanded back to its grave work of moving the ponderous spheres. The final resolution of all physical and chemical forces into a single one is no novel idea; it has been the constant burden of the highest strains of Science for many years. It is her grand, triumphal song of prophecy. Mr. Coues is not content to say that such a thing may be; he undertakes to explain *how* it is, and in so doing he has given himself over to the wildest imaginations.

We wish not to be misunderstood in these remarks. We do not pretend that the view which the physical sciences take of nature is the only true view, or that it is the highest. The poet may look at nature for its beauty and sublimity; the moral philosopher may penetrate behind its physical and superficial charms to see its moral beauty; the Christian may study in nature the ever-present hand and mind of God. The mechanical

philosopher will, of course, investigate the mechanism of the universe according to the principles of ordinary mechanics. Why should it be objected to mechanical philosophy that it is mechanical? Much less should it be charged to science in general, that it analyzes, in order to understand and comprehend what would otherwise be too vast and too complex for a human mind. If we study nature in relation to its forces, then, of course, we consider the phenomena as accomplished by machinery. The mechanical philosopher may be, and sometimes is, a moral philosopher also, like Newton. He may be a devotee as well as a mathematician, like Pascal. He may be a Christian as well as an analyst, like Bowditch. If he is not always, he ought to be. He ought to admire and worship no less than to dissect and calculate. He ought to divide and subdivide in order afterwards to reconstruct and be transported by the unity, wisdom, and grandeur of the whole. In his study of specialities, in his absorption in the minute and the partial, he should always have reference to the idea that there is but one creation and a single Creator. The man of science should be a whole man in intellect and heart, even more, perhaps, than those who follow other professions. But he is exposed to the infirmities of a common nature, and while his hands are in contact with the earth, his soul may fail to aspire and ascend. But, whatever his faults and his defects, he does not deserve reproach for studying the mechanism of the heavens and the earth as he would any other mechanism. The only way by which he can enter into the plans and operations of the Creator, is by reflection on the modes of thought and action which have been followed by the human intellect. Is it objected to the divine that he is a theologian, or to the poet that he is imaginative? Why, then, be alarmed at the chemist because he tries so many experiments, or at those whose function it is to make researches into the laws of force because they are so mechanical?

We believe that the foundations of mechanical philosophy have been laid as carefully as those of geometry; and we have no fear that they will respond, by even the most delicate vibration, to the frequent, but tame, assaults which are made upon them. We must distin-

guish between mechanical axioms and the forces which are developed by their aid. We must also distinguish between science and a higher philosophy, of which we can conceive, though we cannot realize it; which may one day be a part of the possessions of the mind, though its very foundations are not yet unchangeably laid. The most we claim for physical theories is, that they bring the wonders and truths of this matchless universe down to the circumscribed comprehension of our feeble minds, and furnish exceedingly accurate generalizations of phenomena, and allow us to see through a glass darkly. When they cease to abide this test, they will be abandoned by the cultivators of science. We entirely waive the question whether this mode of representation expresses the true way in which God acts in nature. God's ways are not as man's ways. There is as much difficulty and as much danger, too, in discarding all secondary causes, and bringing God into immediate contact with the facts of sense, as in interposing the machinery of science between the Creator and his creation. If the latter conception makes him a stranger to his works, may not the former treat him with too great familiarity? If the latter banishes him from his own universe, may not the former confound him with it? If the latter incurs the danger of transforming the incomprehensible God into a wonderful artisan, is the former safe from destroying his personality?

Some one may say, If this is all that you claim for the theories of Franklin, Ampere, and Newton, that they are general descriptions of the facts, — if, for example, the physical theory of astronomy is nothing more than a generalization of the motions we behold in the solar system and elsewhere, — how does modern astronomy surpass in merit the old doctrine of cycles and epicycles? Did not that, by the admission of the best astronomers and mathematicians who now live, express the facts most perfectly, and is it not so elastic in its character that it could be accommodated to any form of planetary motion? Where, then, is the boasted progress of astronomy? The celebrated doctrine of cycles and epicycles was invented by that master of ancient astronomy, Hipparchus. It was not a necessary adjunct of that long-lived compilation of ancient astronomical views which has been transmitted

to us under the sanction of Ptolemy's name. It played a conspicuous part in the Ptolemaic system, but even Copernicus was not in a condition to dispense with it altogether. This doctrine teaches that the planetary motions are brought about by an arrangement of circles riding upon circles, not unlike the tooth and pinion wheels of our human machinery. The idea was happy for a geometer. It is obvious that any variety of motion may be caused by so facile a principle, if only the proper number of circles is selected, and of suitable size. It might be said truly of such a system, that it is incapable of proof. It certainly harmonizes with the planetary motions; but it is equally ready to respond to all other conceivable motions. We may understand, therefore, the import of Mr. Whewell's remark: "As a system of calculation, it is not only good, but in many cases no better has been discovered." It is, therefore, a correct geometrical generalization of the astronomical motions. But does it give a possible mechanical generalization of these motions? This question does not appear to have given much anxiety to the old astronomers. They did not trouble themselves with forces. Their only solution of the mechanical problem was to assign to each circle, or the crystal sphere of which it was a part, a tutelary divinity, which moved it independently of other circles, but in preëstablished harmony with them. This is the only way in which such a system could exist as a physical reality. If this mechanical view is analyzed and interpreted according to the Christian idea, it simply states that each planet moves in its own particular orbit as a man or other animal walks, by means of the life sustained in it by the Creator. Kepler supposed the planets to be monstrous animals, sporting in the ether and basking in the sun. Lord Monboddo says, in so many words, that the celestial bodies are moved by minds intellectual. "And although," says Mr. Kerigan, "the mental researches of man are *too shallow* to enable him to form any idea of how a *circular motion* could be given to an object projected into the ethereal region of space,—for with him such motion ought to be in a *right line*,—yet we are not to question the mechanical powers of the Almighty, nor attempt to measure them by our limited ideas. It was sufficient to *will* such motions." The

generalization of Hipparchus is impossible as a system of mechanism. It supposes the suns, planets, and satellites to be geared together by bands and wheels of frightful magnitude. If such machinery could be arranged for planets and comets also, so as to avoid collision, is there any independent evidence of the existence of material bands between the members of the solar system? There is none. All the evidence is against it. No one ever pretended that such was the case. This renowned doctrine of cycles and epicycles, therefore, will ever stand in history, a monument to show that the ancient geometry was invincible, but that the mechanical notions of that elder period were not mature.

How different the reflections to be made concerning the mechanical views of Newton! The force of gravitation, if developed with exactness, will produce the motions we see. And we say that, in this case, the correspondence is a substantial proof of the reality of the mechanism. This law cannot be warped to any kind of motions, as the wheel and pinion theory. Its requirements are minute and imperative. It tolerates no orbit but a conic section. It is consistent with but one class of conceivable motions, and the marvellous evidence in its favor is, that all the varieties which are possible under the law exist, and no others. But it may be said that the law was selected to suit these cases, and no others. Even if this were true, it would show an economy in modern science which does not characterize that which preceded it. But history contradicts the assumed fact. The law was originally selected to explain the moon's motions. It afterwards appeared that the same law included every motion in harmony with Kepler's analogies. It was also selected without any reference to some of its own more remote consequences, and yet every one of these consequences which the law renders necessary does actually happen. By the universal admission of his successors, Newton has been pronounced, not only one of the greatest, but perhaps also the most fortunate of men. The Newtonian system is proved in a way in which it would be impossible to prove the ancient hypothesis. Newton did not feel his way along without committing himself to Nature until all her phenomena had been observed, and then adjust his law to all of them; neither did he make it

so general that it might answer for any latitude or longitude in the wide universe of created or imaginable motion. It was built on a few facts, and has proved sufficient for all facts. It is so minute and distinct, that any departure from it would be instantly registered in a hundred different observatories.

Again, there is no mechanical difficulty in Newton's theory. So far as we can obtain the same conditions, we may imitate the planetary motions. We do not assert the existence of the force of gravitation, inherent in the planets or sustained in them by God, as a reality, for there may be other and diviner ways of accomplishing the same results which may be never dreamed of in human science and philosophy. We only say, that, if we assume such a law of force, we can explain all that we observe; and all that follows from it we do observe. We can explain the planetary, cometary, and sidereal motions, not by erecting circles upon circles, and wheels upon wheels, whose existence is not attested by the senses, but by supposing this force to act without the intervention of machinery on the bodies subject to its control. It is not, therefore, like the other, such a machine as man might make, and would have been most likely to make; it is a machine of which man would not have dreamed, if it had not been forced on his notice by its exhibition in the sky. It is a machine which he can understand and admire, but poorly imitate. It is free, to a great, if not to an absolute extent, from all the besetting infirmities of human machinery, — friction and resistance; and realizes the delusive dream of all man's mechanical aspirations, a perpetual motion. It is a machine, but it is a divine machine. It is mechanism, but it is the mechanism of the heavens. Its contriver is an architect, but he is a divine architect. When we select even this lowest attribute of God, when we study his perfections as the contriver and builder of this material world, his power and wisdom transcend the wisdom and power of generations of his noblest created intellects to a degree which allows of no adequate expression. Let us look up to God as a geometer and mechanic. Let us study and admire his grand and inimitable architectural designs. We need not the less adore him for the spirits he has created, and for his own transcendent holiness and goodness.

J. L.

ART. V. — REFLECTIONS.

THE wish of each sex to please the other seems to have given the first impulse to polished manners and elegant arts, and thus to lie at the foundation of civilization.

Resistance to small temptations gives strength to overcome great ones. All the moral strength which a man can gain he will sooner or later need.

EPITAPH FOR AN INFANT.

This little dewdrop of the dawn
Glittered a moment, and was gone.

An infant's entreaty is more powerful than a sovereign's command.

The sayings and doings of men of high reputation have an "imputed" merit independent of their own.

A little praise upsets a little mind.

It is better to set a good example than to follow a bad one.

I have heard a man say that the way by which he had kept his health was by living to-day so as to be well to-morrow.

Distrust poisons the cup of life, and fetters the energy of men. The defences which it makes them build impair their own and others' power to act and to enjoy. But distrust is the necessary consequence of sin. One man's fraud or violence may destroy the mutual confidence of thousands.

An evil when dwelt upon is apt to become unduly magnified, and our efforts and sacrifices to get rid of it are often ludicrously disproportionate to its real importance.

The way to have all that you want is to want only what you can have.

If men had more self-control, self-indulgence would be more safe.

A great mind makes public interests paramount to private. A small mind does the reverse.

A suggestion is often more effective than an argument.

Life is too short to admit of our doing all the things which are to be done "only this once."

Unbolted flour, 't is often said,
Affords a much more wholesome bread
For strengthening the frame of man
Than flour that 's sifted from the bran ;
So he, whose lot it is to bear
Labor and suffering and care,
Acquires a stronger, healthier tone
Than those to whom they ne'er were known.

The importance of discoveries is often in singular contrast to the worthlessness or insignificance of the discoverers. God seems to choose such inadequate means in order to show distinctly that the good is his gift.

Many men write worse than they need to, in straining to write better than they can.

How much pains people take to provide things unnecessary, and preserve them unused!

To excuse our faults on the score of our weakness is to quiet our fears at the expense of our hopes. For if we cannot be virtuous, we cannot expect the rewards of virtue.

The conduct of men depends so much on their peculiarities of constitution, and the thousand influences which have acted and are acting on them, that no one but their Maker can judge them aright.

Most people intend, some time or other, to accomplish some great thing or other, but usually fail somehow or other.

The following fable is translated from Lessing: —

A lion once, in days of yore,
Laid by the terrors of his roar,
To mingle (so old tales declare)
In friendly converse with a hare.

"Can it be true," says puss, "dear Sir!
(What I have heard my friends aver,
That the mere crowing of a cock
Will give your royal nerves a shock?"
"Indeed," his majesty replied,
"The fact, my dear, can't be denied,
But idle terrors, 't is confessed,
Will agitate the noblest breast;
The grunting of a pig can daunt
That mighty beast, the elephant."
"Ah, now," cries puss, "the reason 's clear
Why hares turn tail when hounds draw near."

Petty irritations are often aggravated, prolonged, or renewed by ill-judged apologies. Turbid waters settle best when left quiet.

A reasonable man does not expect to find men in general so.

Most men can do little. If not satisfied with that, they are likely to do less.

Is it true that "Envy does merit as its shade pursue"? Merit, if obscure, is not envied. But distinction is, even if unaccompanied by merit.

In youth men are critical, for they see others' faults, but not their own. Experience makes them forbearing, by teaching them their own need of forbearance.

✓ Men often try to light the world with a lamp that has gone out.

A man continually forgets, so that, if he does not continually learn, he will know less and less.

The greatest changes in the face of nature and the condition of men often take place the most quietly.

Self-inspection is the best cure for self-esteem.

The bat, amid the thickest night,
And even when deprived of sight,
Safely pursues her rapid flight,
Led by a strange, mysterious sense,
The gift of bounteous Providence;
So when our way is wrapped in gloom,
Which reason's ray cannot illumine,

Still 'bides the sense by which we learn
'Twixt good and evil to discern ;
And doubts are hushed and terrors flee
Before the indwelling Deity.

The evil of apprehension is often worse than the evil apprehended.

When a man's defects are overlooked in consideration of his merits, the former often increase with years.

The confession of a defect is often made a substitute for the correction of it.

A virtuous effort may fail, but not a virtuous life.

A man is often sure that he is right, because he is too stupid to see that he is wrong.

Severe trials fit us to profit by light ones.

The more a man improves by the faults and follies of others, the less he has to smart for his own.

How can a man expect that others will be candid with him, when he knows that, under similar circumstances, he should not be candid with them?

A great reader, habitually borne on the current of other men's ideas, is not likely to work out a channel of his own.

Luxury is sometimes defended as supporting labor, but labor is ill employed that produces only trifling or hurtful results.

Dr. Johnson habitually dwelt on moral truths, clothed his thoughts in finished language, and stored them in his capacious memory ; so that composing a moral essay was little more to him than what copying a rough draft is to most persons.

Warnings generally come before punishments. To live wisely, we must profit by them seasonably.

Men often present to others motives which they themselves despise, and respect for their good opinion often prevents others from following their advice.

Death has consigned many a man to fame whom longer life would have consigned to infamy.

Names become strangely travestied by use, particularly in passing from one language into another. Many years ago, a Spanish boy named Benito (pronounced Benēto) came to live in Salem. On the voyage the sailors called him Ben Eaton, and this was the name that he afterwards bore.

Misstatements about subjects respecting which men know and care little often pass current because no one takes the trouble to examine them.

Success and failure are often attributed to partial or transient causes, when really owing to general or lasting ones.

Men usually seek a wide reputation rather than a high one.

Men in general are very willing to be led, if they are led courteously.

High-colored statements, like showy daubs, attract attention, but only to produce disgust.

Good rules cannot supply the place of good judgment.

It depends very much on the speaker and the occasion, whether general observations are received as great truths or as stale truisms.

Half-doing commonly leads to twice-doing.

A controversialist who stings his adversary adds to his energy. A retort is almost always easy to a man in whom anger has overcome respect for his opponent and for himself.

We will add one more to the many translations of the French epigram:—

“Le monde est plein de fous,
Et qui n'en veut pas voir,
Doit se nicher dans un trou,
Et casser son miroir.”

The world is full of fools;
They're never out of view,
Unless you turn your back
On men and mirrors too.

Moral teaching is effectual principally by deepening impressions already made by experience. A moral lecture addressed to a person whose own experience does not bear testimony to its truth, is of little avail. It is not strange, then, that the young should find such discourses tedious.

Moral stimuli, like physical, become less effective by repeated application. Hence it is important to vary the incentives to goodness.

Every man must form his rules of conduct for himself. One man's moral principles are not likely to meet the wants of another, any more than one man's coat is likely to fit another. A man's principles should be such as to counteract his predominant weaknesses, and as these differ in different men, different principles or rules of conduct will be required to meet them.

Men tend continually to extremes, and are kept within bounds principally by collision with each other.

Well-grounded religious notions require much experience of life. God lies beyond the objects and interests which surround us, not before them. We must understand them before we can understand their author.

To do much good, one must often endure much evil; but it is better to fix one's eyes habitually on the means of doing good than on the need of enduring evil. To act with spirit, one must be able to act with cheerfulness. The only way to escape the evils of life is to rise above them.

Great lies, portentous absurdities, often obtain credence more readily than falsehoods of less pretension. Ordinary falsehoods can usually be disproved by ordinary means; but when men are called upon to believe something entirely beyond their comprehension, their love of the mysterious and longing for the supernatural dispose them to be duped by bold impostors. Those who strain at a gnat will often swallow a camel.

To do one's duty makes one happy. A happy man feels that God is benevolent. He who thinks God benevolent trusts in him. Right-doing, then, produces trust in God.

"Great is Diana of the Ephesians," and always will be while the ruling motives of men are profit and ease, for profit and ease are best secured by adherence to established institutions.

How often painful feelings rise,
Flush in our cheeks, and fill our eyes,
When looking back ourselves we see
Daguerreotyped in memory !
How sharp is by-gone folly's dart !
How long it rankles in the heart !
How light a touch renews the smart !

When reason wakes and travels o'er
The path which folly trod before,
And pleasure drops the fair disguise
Which made her lovely in our eyes,
We feel her venom'd sting the more,
The more we felt her charm before.
'T is sweet to sip of pleasure's cup,
But woe to him who drinks it up !

If the spirit slumbers, it will be seized like the slumbering Gulliver in Lilliput, and bound down to the earth by a host of contemptible assailants.

When prevalent errors are clearly exposed, they are seldom generally renounced, but usually disappear by degrees and are forgotten.

Men's happiness and unhappiness depend mainly on circumstances which in description would seem insignificant. Their apparent insignificance arises from the impossibility of our feeling for others as we do for ourselves. We are hardly capable of sympathy, except with those whose feelings are excited by great good or great evil. And we, therefore, continually overlook the effect of trivial circumstances on the happiness of others.

A man writes easily on subjects which he well understands, but with difficulty on those of which he knows little. Of course the merit of his works is often in an inverse proportion to the labor bestowed on them at the time of composition. But what costs a man much labor he is apt to value more than what costs him little. Writers are often, therefore, poor judges of the relative merits of their works.

Will not steam eventually fuse the languages of Western Europe into a *lingua Franca*? The mongrel dialect of some novelists and travellers shows the effect of the free intercourse between different countries.

The notions which men received upon the authority of others in childhood often lie in their minds through life unexamined, and with the weight of axioms. This is the chief source of political and religious bigotry.

The source of love is sympathy,
Whose gentle promptings teach
Two hearts to beat in unison,
Responsive each to each.
From heart to heart alternately
Her influences run,
And draw them close and closer still,
Until the two are one.

The common sayings and doings of extraordinary men are interesting, even if they have nothing peculiar. For the points of resemblance between great men and ordinary men are worth noticing.

Long after the works of great men, statesmen, writers, artists, have perished, and their fame has ceased, the influence of what they have done may remain and spread, and perhaps afford gratification to their departed spirits. If such spirits take an interest in the world which they have left, it is natural to suppose that they will rejoice much more in their influence than in their fame.

The sense of danger increases with years. The infant knows no danger. The young child knows little and fears little. They continue in life only because they are closely watched. Time removes the guardianship, discloses continually new sources of danger to body and mind, and shows that health, life, and virtue can be preserved only by continual vigilance. So that men, having begun life with being rash, end it with being timid.

Romantic names given to children are usually curtailed of their fair proportions to fit them for use, and thus become more vulgar than names of no pretension.

If we live as we should,
We shall die as we would.

A sneer is a poisoned arrow ; a rebuke is a surgeon's knife.

Exercise is labor without its satisfaction.

The soul, like new-fallen snow at birth,
Is soon defiled when lodged on earth ;
And as the sun, with fervid beams,
Dissolves the snow to running streams,
Whence pure, ethereal vapors rise
To seek their mansion in the skies,
So do the beams of grace divine,
Melting the soul on which they shine,
Purge off the earth's polluting leaven,
And draw the spirit up to heaven.

Facts are often converted into fictions, by being seen through the medium of the imagination.

Some men's wisdom overflows, because their capacity is small.

The objects with which a man has long been familiar are written over with mementos of the past. When the old have to part with their homes, it is like losing the journal of their lives.

The existence of an actual " Prince of Darkness " seems to be taken for granted by the great majority of men. If there is any form of figurative language which approaches universality, it is that which is borrowed from him. He is a stereotyped simile, familiar in the mouths of men as household words. Poetry is full of him. Lucifer, Satan, Mephistopheles, are continually at work ensnaring the souls of men. He has been called the hero of the great English epic. Almost every wild landscape shows some of his handiwork. Many a ruined tower bears the marks of his might. Infinite is the number of the crimes that have been committed at his instigation. The progress of intelligence, it is true, has reduced his consequence, but though he is no longer the rival of Omnipotence, he is still the arch-enemy of man, the only satisfactory solution to the multitude of the conflict of good and evil continually going on in their bosoms.

The natural product of knowledge is not pride, but humility, since the great lesson which it teaches is the

extent of our ignorance and the limited nature of our faculties.

The pride of man in what he knows
Keeps lessening as his knowledge grows.

There are incessant calls upon men for benevolent efforts, but it is not necessary nor proper for a man to endeavor to be useful in a great variety of ways. He should select his objects, and to most of the appeals which are made to him he should respond only by increased devotion to the objects which he has chosen. If he uses such appeals as incentives to greater efforts in his particular sphere, he will accomplish more than he would if he were to fritter away his powers and means in a great variety of efforts.

Simplicity of character, even that degree of it which provokes a smile, does not diminish the reputation or influence of a man of sterling worth. It inspires confidence, and confidence is the corner-stone of influence.

A disease appears to become common as soon as it receives a name, for its name leads people to inquire into its nature, and many of them find that its symptoms are familiar to them.

Those who struggle earnestly with bad feelings acquire at length the power of crushing them without a struggle.

System sometimes costs more than it is worth. It is important to observe rules, but it is hardly less important to be able to break them.

A man who never breaks a rule
Is little better than a fool.

People use language so differently, that it is often difficult to judge of what a man means by what he says, unless we are accustomed to his mode of talking. I have heard one man speak of another as being "stout and hearty," when he meant to describe the bloated appearance produced by intemperance.

Man cannot alter the conditions of his existence, but he can adapt himself to them, and "make the happiness he does not find."

What a continual war is waged between our pride and vanity, on one side, and our true interests, on the other!

The great business of each generation is to train and provide for the next.

The happiness which men derive from their possessions is much in proportion to the degree to which their own labor is mixed up with them. A little that a man has earned gives him more satisfaction than much that has come to him without effort of his own.

What one man thinks censure, another thinks praise. In fact, men are often praised for their faults and blamed for their virtues. And acts of virtue which cost a man little effort are often much more commended than those which required the greatest sacrifices.

A man superior to others in some respects is apt to forget that the constitution which fits him to excel in some particulars may make him fall below the average of men in others.

Advice is a medicine that requires to be administered discreetly. Otherwise, it will do more harm by disturbing the patient than good by its specific effect.

Until the drama of life has been acted out, we cannot understand the plot.

It is the remembrance, the presence, or the apprehension of evil, that makes men serious. Without suffering, this would be a world of triflers. As one of the fair speakers in the *Rape of the Lock* says:—

“ O, if to dance all night and dress all day
Charmed the small-pox or kept old age away,
Who would not scorn what housewife's cares produce,
Or who would learn one earthly thing of use? ”

A man who is talking hurriedly, and hesitates between two words or phrases, frequently brings out a medley of both.

A man who is proud of small things shows that small things are great to him.

Men often sacrifice a good thing to obtain a better one of the same kind, when if they had "left well alone," and turned their efforts in a different direction, their sum of good would have been greater.

Many superstitious notions probably had their origin in devices to answer particular ends. For instance, a careful housekeeper would be very likely to originate the saying that "it is bad luck to break a looking-glass."

The poor are generous. One who has but little mind is the most ready to give others "a piece" of it. I once heard it remarked of a certain person, that it was not strange that her mind was almost gone, as she had given so many people "a piece" of it.

Arguments originate from belief quite as often as belief from arguments. The belief is often a mere prejudice unsupported by reason, until some occasion arises for defending it; and the arguments are the result of a search for reasons to support the prejudice.

Greatness is the parent of fame, but obscurity is the parent of greatness.

A man's judgment of others affords him the best index to their judgment of him.

We distrust the opinions of those who observe little and think less; and this is the reason why most persons distrust their own opinions, and follow the lead of any confident and plausible adviser.

The greatest commotions often take place about the smallest matters, for these are what most readily interest most men.

High words usually indicate low manners.

A remark often strikes, not from its intrinsic merit, but from its appropriateness to the occasion, and appears flat when repeated, because the occasion cannot be recalled.

No teacher can supply the place of experience to the young, for nothing but experience can correct their rash confidence in their own judgment.

Good and evil are continually assuming new forms, which take the place of old ones. We frequently err when we consider the new forms as an addition to the old stock.

Thoughts that defile or darken and corrode the mind we should put away instantly, as we remove oil or ink from our clothes before they can work in and become fixed.

What passes for virtue is often but habit formed by external influences, and liable to fail with a change of circumstances.

Is not every act of duty attended with more pleasure in the recollection than pain in the performance? If so, every duty done adds to the sum of a man's happiness.

From the weakness of man's intellect, his general principles are drawn from partial observations. Of course they are true only to a limited extent, and often run counter to each other. There is a great variety of them, suited to all tastes and interests. Like the mercenary troops of the Middle Ages, their services can be had by any side that wants them.

The old are apt to forget how fast circumstances change, how soon men and events are forgotten. The names which stir them like a trumpet are idle sounds to younger ears. Each generation lives in a different world.

Man walks through life as through a crowded street, continually turning to the right or left to avoid or accommodate others. The tastes and interests of different individuals and classes are in continual conflict, and the relative strength of the conflicting elements is continually varying; so that the normal condition of life is perpetual turmoil.

We cannot enjoy good without constant risk of incurring evil. The flowers and fruits of life grow on the brink of a precipice.

The idea of different degrees of advancement among immortal beings, growing out of the different periods of their creation, is lost when we think of eternity. How

little distinction there will be three millions of years hence between the man who died to-day and the man who died three thousand years ago! The proportion of three thousand years to three millions is about that of twenty-five days to seventy years.

Experience says that all must suffer. "And hopest thou hence unscathed to go?"

When we complain of the folly of mankind, we forget that, if men had been wiser, they would not have been put here to get wisdom.

Man makes his condition as good as it is by always trying to make it better than it is.

The effect of poetry or eloquence often depends upon the accidental associations connected with some word or phrase, borrowed perhaps from the nursery, the school, the market, the familiar proverb, or the historical reminiscences of a people. When passages which derive their interest from such sources are translated into a foreign language in which the corresponding words have no such associations, the spirit evaporates. In fact, faithful translations of foreign poems are seldom acceptable, except to scholars familiar with the originals.

A man without interest in his occupation becomes lethargic, and life drags heavily. A man unduly interested becomes restless, eager, narrow-minded, blind to his most important concerns, and tormented by a diseased craving that seeks gratification at a cost vastly disproportionate to the good gained. It is hard to see and reach the just medium.

The more reputation a man has for cunning, the more distrust is felt of him, and the less can his cunning avail him.

As the source of the ludicrous is incongruity, things sad, and even disgusting, may be ludicrous. For instance, drunkenness is so incongruous with the character of man as a reasonable being, that it excites the merriment of the thoughtless. But the mirth which usurps the place that belongs to sorrow and shame hardens and corrupts the heart.

Great efforts to benefit society sometimes seem to produce little good. But the seed sown often springs up and bears fruit in after years. And one good effect is sure to follow them. They keep alive a benevolent spirit, and thus prepare the way for more successful efforts in time to come.

Check the beginnings of mental agitation, and no violent commotion of the spirits will take place. If the wind could not ruffle the waters, it could never raise waves mountain-high.

We may not see why we should suffer, but we do see that suffering naturally produces wisdom and virtue, and that wisdom and virtue naturally produce happiness.

The Christian has what Archimedes asked for, a point of support detached from the world, and this enables the Christian teacher to move the world.

When, heralding the tempest's end,
The bow of promise spans the sky,
Its transient hues of beauty blend
With faith and hope that never die.

Thoughts are like fruits ; they take time to ripen, and when ripe drop off of themselves, but are unfit for use till then.

A kind and skilful adviser excites others to think by slight suggestions, and spares their pride by leading them to form conclusions, instead of broadly stating his own.

Generally speaking, the men most widely known and honored by their contemporaries are those who apply established truths to valuable ends, while those who extend the boundaries of natural or moral science often pass their lives in comparative obscurity, and become famous only after death.

Men's situations do not often suit them, unless they are compelled to suit themselves to their situations.

Persons of little mental training confound impressions and inferences with facts to such a degree, that their statements must be received with great caution. When they undertake to repeat a man's words, they often give

you, not what he said, but what they think he meant, and in relating facts they mix their opinions with them, so that the two cannot be discriminated. In repeating a story, they add to the statement which they received the inferences which they think necessarily follow. In this way stories grow so much by repetition, that the tale of "the three black crows" is not more extravagant than many which are told. We may add, that men seldom have precise knowledge except of subjects in which they are personally interested; but pride relucts at saying, "I don't know," and so they make confident statements, when they should confess ignorance.

A man is always able to learn or do something that will be of service to himself or others, although he is not always able to choose what that something shall be.

E. W.

ART. VI. — ANCIENT MONEY TRANSACTIONS.

WE should endeavor to divest ourselves of the opinion, that men, in the most remote ages, were very different in disposition from those of our times. As the true explanations of the causes, intentions, and principles of ancient laws are disclosed to us, we perceive very striking resemblances between ancient and modern people. The manners, customs, and information of distant nations vary from our own, but the impulses and dispositions which originated them were the same with our own. References to the intentions of both are essential to the just explanation of the practices of either.

The world must have been considerably advanced in knowledge in the days of Abraham, who, born in Chaldea, in the midst of ancient civilization, luxury, and superstition, is the first one of his race mentioned by Hebrew writers who possessed and paid out gold or silver, in both of which, as well as in cattle, he is described as having been "rich."

Abraham left his father's home and kindred, according to the narrative, because "they served other gods." And when we see the "strange gods of the Assyrians," we obtain some idea of the causes for various commands in the Hebrew laws, that appear not necessary at the present day, with our customs, some of which, however, may still be obnoxious to similar reproof. Abraham is represented in the Hebrew writings as having purchased "a field for a possession," "with a cave, and all the trees," as a burying-place for Sarah, his wife, paying for them "four hundred shekels (or *weighed pieces*) of silver, current with the merchant." This is a very intelligible announcement of a large circulation, at that time, and also of some exact regulation in the quality or "standard" of the "pieces" of metal designed to be designated by the very notice of their weight. The whole description of formal witnesses, and the systematic transfer of values, exhibit the prevailing civilization of the age in which Abraham lived.

The affinities of weights among ancient nations are thought to prove that the Roman weights came from Greece, the Grecian from Phœnicia, and the Phœnician from Babylon, near Abraham's birthplace. Thus our own weights claim a very respectable antiquity.

The fact of Abraham's paying "pieces of silver by weight," is related in the Hebrew writing as "a common usage." Some readers may not be aware that every "piece" of money issued by modern mints is "weighed"; the mint performing acts which were formerly common to "the merchant" and the goldsmith, which practice still prevails among the Asiatics. Any suspicion of loss in weight causes gold coins to be reweighed among us, privately, now.

In the book of Job, considered more ancient than the other Hebrew writings, we read that, after his recovery from sickness, "every man of Job's friends and relations gave him a piece of money, and every one an ear-ring of gold." Allowing for a peculiarity in the idiom and the poetic character of the language, we understand that Job received *either* an ornament of value, *or* a piece of money from *each* of his friends and relatives. The interchange of such presents was a well-known compliment in the East. The words "ear-ring" and "money" may

have been used synonymously, for ornaments of gold were often delivered "by weight" as "money," their title of fineness being appreciated by the parties.

"The images" which Rachel "hid in her camel's furniture" were called "gods," probably from their devices or forms, being in the shape of animals, which were worshipped. Laban's "images" or "gods" were also evidently considered and plainly termed "money," which his daughter Rachel "stole," in the language of the Scriptures, as a feminine assertion of her right to an inheritance from her father's house, where, she says, "she was treated as a stranger." The merchant-men from Midian, "with camels bearing spicery into Egypt," who bought Joseph from his brethren, appear to have had their "silver" "pieces" ready for that trade, and counted them without delay. Jacob's sons carried "money" into Egypt "to buy corn," which money was afterwards found tied up in their corn sacks, and was tested by weight, when it was returned the second time.

The arts of casting small images or ornaments of gold, and stamping or graving impressions on "pieces" of metal, like *coins*, as well as the more difficult process of graving on gems, were known and mentioned at a very early period of history. Indeed, the existence of "good gold," that is, we presume, of good quality, is noticed in Genesis before the creation of man. The name of "the land of Havilah," in which it was found, being obtained from one of the descendants of Shem, shows that the written record of this curious tradition was made long after the precious metal was discovered.

The Hebrew laws designate prompt cash payments, and indicate a currency of different denominations, the smallest, as well as the largest "pieces"; for "the wages of an hireling" were ordered to be "daily" paid, and such "wages" could not have been of large amount, unless the circulation was greater than we estimate it. Payments in metallic money, "weighed pieces," "images," ornaments, or coins, are frequently mentioned in the Hebrew writings. They are also exhibited in the descriptions of ancient Egyptian paintings.

How is it that, with such numerous evidences of their existence, no coins are found in the ruins of Assyria or of Egypt? We perceive, in the accurate details of

the Hebrew writings, that Jonah "paid his fare" like a passenger, from Joppa, a port on the Mediterranean, to Tarshish, probably Issus, on his route to Nineveh, where Mr. Layard is said to have discovered a monument erected to his memory; at any rate, inscribed with his name. But Mr. Layard mentions, that "no coins have been discovered among the Assyrian ruins, nor is there any thing in the sculptures to show that the Assyrians were acquainted with money, as in Egypt." It is also remarkable, that no coins of great antiquity have yet been found in Egyptian ruins, although the Egyptians are known to have had a metallic currency.

Herodotus visited Babylon, "which once gave laws to all the nations of the East," about 2,300 years ago, and then described the signs of its decay. He relates that "all the coins which remained from the surplus revenues of Asia, after defraying the current expenses of the year, were melted into *earthen jars*. When the metal cooled, the jars were broken, and the bullion placed in the treasury." This description of a simple usage, of apparent insignificance, elucidates in a distinct manner the state of the mechanic arts in the time of Herodotus. We have no doubt that the words translated "earthen jars" refer to what we call "sand crucibles," which are frequently alluded to in the impressive compositions of the ancient Hebrews under the title of "*the melting-pot*."

Gold and silver being well known, and used as media of exchange in the earliest ages on record, let us attempt to discover if some substitutes, *similar to our own*, did not, in the progress of ancient civilization, take the place of their metallic currency.

We have been informed that Mr. Layard, during his investigations in the neighborhood of ancient Nineveh, has discovered "a chamber filled with terra-cotta tablets, the inscriptions of which are stamped in."

The "Account of Nineveh and its Remains" affirms that

"The most common mode of keeping records in Assyria and Babylonia was on prepared bricks, tiles, and cylinders of clay, baked after the inscription was impressed upon them." "The characters appear to have been formed by an instrument, or may sometimes have been stamped." "The Chaldean priests

informed Callisthenes, that they kept their astronomical calculations on bricks baked in the furnace."

A similar practice is described in the Hebrew writings. Ezekiel, who lived near the river Chebor, in Assyria, was commanded "to take a tile, and portray upon it the city of Jerusalem." In those countries, such processes of publication offered an excellent means of protection against insects of destructive character, and Ezekiel's practice presents a very decided representation of what we should call "a geographical lithograph," — in intention, — still differing from our mode of procedure in forming modern maps.

Mr. Layard describes as upon two hexagonal cylinders,

"About sixty lines of writing on each side, of such minute characters that the aid of a magnifying-glass was required to ascertain their forms. Royal names are frequently repeated, and the whole appears to be some public document or historical record." "Upon a barrel-shaped cylinder of baked clay, at Bagdat, there are many lines of writing, accompanied with the impressions of seals, probably of attesting witnesses." "On a fragment of tile brought from Nimroud, in the most minute letters, are parallel columns, apparently of words and numbers, like an account."

"On a rectangular tile, a small engraved cylinder of stone or metal appears to have been rolled, or passed round the edges, probably to prevent enlargement or contrefaction of the document." "Tablets of alabaster, inscribed on both sides, were also discovered among the ruins of Nimroud." "The inscriptions on the Babylonian bricks are generally inclosed in a small square, and are formed with considerable care and nicety. They appear to have been impressed with a stamp, upon which the entire inscription, and not isolated letters, was cut 'en relief.' This art, so nearly approaching to the modern invention of printing, is proved to have been known at a very remote epoch to the Egyptians and the Chinese."

Wilkinson's "Account of the Ancient Egyptians" informs us that "a soldier's leave of absence had been discovered among the ruins of Egypt, written upon a piece of broken earthen-ware." It has also been discovered that the Egyptian monarchs "stamped their names on bricks or tiles, which were then burned in the furnace." This practice must have served as evidence of some important matter, for we cannot suppose it one of simple

idleness or uselessness. The stamps employed were formed of blocks of hard wood, several of which are preserved in European collections. The characters are generally "incised," so that the impressions are "en relief," prominent, or raised above the surface. Stamps, or blocks of letters, have been used by the Chinese, upon paper, from a very distant period.

These descriptions of ancient customs all indicate the same precautions and care which are now employed on printed, or engraved, and written bills, for monetary exchanges among us, and it would be a curious discovery if some of these ornamented cylinders, tiles, or bricks should prove to be receipts for funds drawn from the ancient Assyrian or Egyptian treasuries, or bonds which have been presented, redeemed, and paid. Let us suppose that, "for the despatch of business," tiles, thin bricks, or cylinders of clay and earthen-ware, stamped with the sovereign's seal, bearing his name and titles, (figured images within a scroll,) were employed as evidences of deposits in the public treasury, or were issued by the proper officers, as *durable* receipts for bullion, valuable ornaments, and money lent to the government. Let us suppose them, in fact, to have answered all the purposes of modern stocks, and to have been tokens of loans and receipts for subscriptions to ancient Egyptian and Assyrian investments. The appropriations for civil and military lists, for aggressive or defensive wars, for ecclesiastical and other public establishments, must have been paid anciently in some way. Bricks impressed with the sovereign's sign-manual form certainly as precious certificates as printed or engraved paper. The value of each would be in exact proportion to the confidence, or the want of it, in the people who lend or borrow. In times of adversity or pressure, such tokens would be handed in for payment. With the declension of the parent countries, the precious metals would take the course of emigration to distant colonies, and gradually change their forms and devices, as they do at the present day. If the receipts *are* found, the "coins" and bullion have passed elsewhere. The same results would again ensue under similar circumstances now.

From the freshness of the *metallic* colors used by the artists upon the unfinished sketches and paintings on

some of the walls of Egyptian temples overwhelmed by sand for many centuries, we have evidence of a very sudden interruption to industry.

We may consider the Hebrew moral laws to have been designed as a reformation of preceding customs and institutions, and such explanations are frequently offered by their writers to the people. The Hebrew moral laws forbade practices previously permitted or pursued by the Hebrews themselves. The proofs of this have been sometimes carelessly accounted as contradictions, when really dependent upon inaccurate reference to time or periods in their history.

* We may suppose that prompt cash transactions did not prevail generally among the Egyptians, as the Hebrew laws were designed to conflict with the objectionable practices of neighboring nations. Now punctuality in the payment of debts was very strictly insisted upon by the Hebrew moral laws, from the highest to the lowest in society, all other practices being termed "deceptive" or "oppressive." The Hebrew writers also demonstrate the importance of "exact weights," "balances," and "measures," and the whole system of "borrowing upon pledges," often of small amount, exhibits at once the intention to secure honesty, and just protection to the rights and interests of all the people. Although our translation of the Bible asserts that "usury," understood as "the excess of interest above a lawful standard," was the subject of prohibition by the Mosaic laws, Hebrew scholars now interpret the command as *an interdiction of all payment of interest* whatever. By an absolute law, the destitute Hebrew was prevented from paying any interest to his richer brother, who was not permitted to refuse to lend "for his necessities." "A pledge," or "security" for the repayment of loans, was allowed by the law, with well-defined exceptions, in cases of extreme destitution, when even this practice of security was forbidden. The feelings of a poor debtor were kindly protected from the intrusion of a creditor within his door.

"When thou dost lend thy brother any thing, thou shalt not go into his house to fetch his pledge. Thou shalt stand abroad, and the man to whom thou dost lend shall bring out the pledge abroad unto thee. And if the man be poor, thou shalt not sleep with his pledge." — Deut. xxiv. 10 – 12.

The refusal to lend, or the neglect to pay a just debt, are equally abhorrent to the Hebrew code. "The wicked borrow, and pay not again," and "the wicked oppress the poor." Other enactments with regard to the accounts of debtor and creditor show very conclusively, in our opinion, the extent to which a system of credits or general indebtedness had been already carried, and the distinct references to the revolutions and distresses of ancient nations are recognized in history to have prevailed before the Hebrew exodus.

Debt is called "a curse" and not "a blessing" among individual men, as among nations, in the Hebrew writings. Such monetary restrictions appear to have been given for the special benefit of the poorest and most industrious classes, upon whose industry the burden of repayment ultimately falls. The exceptions to general laws, applied for the benefit of the poorest debtors, show that the first care of these laws was for such of the people as were least able to sustain themselves; and this purpose is compared to the practice of good shepherds, who "regard the feeble of their flocks."

The Hebrews were "promised" that they "should have few poor," if they obeyed these laws of moral obligation, and "should have to lend, and not to borrow of other nations." If we regard modern society in countries where different laws and customs prevail, we shall see the appropriate results in the condition and the multiplication of the poor.

But although the poor Hebrew was directed that he should not pay interest to his own brother, or countryman, yet all Hebrews were commanded to pay interest, if they borrowed "of a stranger," — that is, of one not under the same control of moral, economical, and general government as themselves. Such an enactment was highly "honorable" to the national character, but could never have been designed to encourage a system of general indebtedness to strangers.

The Egyptians sometimes pledged their mummies for the repayment of a debt. Among that people, a mummy was considered among the very best kinds of security. It is not improbable that, on this account, among other reasons, the Hebrews were told, "Ye shall not spend money for the dead."

The general opposition to "deception and oppression," which preceded the delivery of the ten commandments, is figured by reference to money transactions among the people, and the objections in the Decalogue, to "theft," "falsehood," and "covetousness," with "superstition," "disobedience," and "murder," appear to indicate that such practices mutually tend to sustain each other.

The value of these ancient records of the Hebrews has been recognized through long ages, by all who respect "truth" and "knowledge," upon which foundation this carefully preserved relic of the history, science, arts, and morals *of life* has been erected for our instruction, and daily becomes more intelligible to the understanding of man, by various accessions of practical knowledge.

The custom of impressing letters and important publications upon clay, stone, alabaster, terra-cotta, mortar, or cement, was one common to many ancient nations, as well as the processes of writing and painting upon skins and parchment, upon leaves, barks, and papyrus, or paper, or upon walls prepared for the purpose. "The ten commandments of the Hebrews" are represented as having been written or graven "upon both sides of two tables (tablets?) of stone; which Moses carried in his two hands." These were easily broken when cast down, in his anger, at the idolatry of the people. Did Moses employ brick, or tile, for stone, — a practice mentioned elsewhere in the Scriptures, — or did he use tablets of alabaster, or terra-cotta, according to the most ancient method in Assyria, as related by Mr. Layard?

In the poetic language of his people, Moses was undoubtedly referred to as "the finger of God," upon this occasion; "Thunder," by a similar image of speech, being called in the Hebrew "the voice of God, thundering." Such interpretations are distinctly given in the occasional and natural references of the Hebrew writers.

The instructions to the people, in Deuteronomy, "to set up great stones, and to plaster them with plaster, and to write upon the stones" (thus plastered) "all the words of the law" (the ten commandments) "very plainly," afford us another reference to the *common mode of publica-*

tion peculiar to that age, and to the former associations of the Hebrews, for some of the most ancient pyramids in Egypt have been covered with cement, and are found inscribed in a similar manner. These still remain to teach us, if we will regard the lesson, how much more lasting and instructive is the "plain language" of the Hebrew, than the complex, involved, and imaginative figures of the Egyptian classic. When we regard the immense expenditures, annually augmenting, to advance men in the knowledge of the arts of life, which prevail in our age, and look back to the rapid progress in information which has been made within the last half-century, we need no longer wonder at the enormous temples, caves, and pyramids of our ancient age of civilization, nor doubt that such vestiges of ancient art and science were also originally intended "to perpetuate institutions" now forgotten in the land in which the ruins lie.

J. H. G.

ART. VII. — MEMOIRS OF WILLIAM WORDSWORTH.*

MEMOIRS of Wordsworth these volumes are. They are not his Life. His Life is in his poems; and his poetry is not only the spirit he lived in, but also it is the record of his existence, of all the chief things he experienced, saw, learned, felt, or thought during eighty years. For to him the poetical was not simply a peculiar way of looking at matters, just as the humorous is an odd way, and pleasant for a minute or two. And then he was not merely a man that was somewhat poetical; he was wholly a poet. In wish, purpose, and manner of thought, in his daily employment, and in what he believed was his calling from on high, he was a poet. Poetry was the window he looked out at, the first thing in the morning; it was his business through the day, and it was something of the strain he prayed in, at night.

* *Memoirs of WILLIAM WORDSWORTH, Poet Laureate, D. C. L.* By CHRISTOPHER WORDSWORTH, D. D., Canon of Westminster. In two volumes. Edited by HENRY REED. Boston: Ticknor, Reed, & Fields. 1851. pp. 472, 518.

"He is no poet at all," say some persons. "And the principles which he wrote on are false." "Lord Byron was right against him," say others. While some readers point to lines, here and there, and even to whole pages, and ask triumphantly, "Is this poetry?" To all this, and to all the many objections that may be started against our estimate of Wordsworth, we shall simply answer, "Some way or other, Wordsworth is a poet, and a great poet. And if he is not great one way, then he is great some other better way, for he is great."

Such various estimates as there have been of Wordsworth's poetry! Sir James Mackintosh said, "Wordsworth is not a great poet, but he is the greatest man among poets." And Wordsworth's brother, Dr. Christopher, asked, "In diction, in nature, in grace, in truth, in variety, in purity, in philosophy, in morals, in piety, does he not surpass all our writers?"

From among divines, philosophers, and poets, the very highest testimony is to be gathered as to Wordsworth. Channing estimates him very highly, and so did Dr. Arnold. And Mr. Ruskin thinks him to be the great poetic landscape-painter of the age. On the Mount of Excellence, they stand above the world, some high, and some very high, — Coleridge the wondrous mystic, — Southey the unwearied scholar with his poetic eyes, — Tennyson with his quick, his Greek sense of the beautiful, — Tal-fourd the dramatist, — Keble in whom the poet and the divine blend in one, — Bryant, Dana, Felicia Hemans. And these, all standing in their honorable places, look up above, towards Wordsworth, and say, "He is higher, much, than we. He is very high."

William Wordsworth was born in the year 1770, at Cockermouth, in Cumberland. His grandfather was a native of Yorkshire. And in that county, at Silkstone, in the Wapentake (Weapontake) of Staincross, the name of Wordsworth is ancient. It occurs frequently in old deeds, and in the parish register of Silkstone, though variously spelt, — as Wadysworth, Wordysworth, Wardesworth, Wordsworth. There was presented to the poet, by his friend Colonel Beaumont, an old piece of furniture called an almery, on which was carved a Latin inscription, to this effect: "This work was executed in the year of our Lord 1525; at the cost of William Wordes-

worth, the son of William, who was the son of John, who was the son of William, who was the son of Nicholas, the husband of Elizabeth, the daughter and heiress of William Proctor, of Penyston. On whose souls may the Lord have mercy."

Wordsworth lost his mother when he was eight years old, and his father when he was thirteen. So that of maternal influence there survived to him, in later years, almost only such as what began to him from the time

"In which, a babe, by intercourse of touch
He held mute dialogues with his mother's heart."

As a youth, he was a little wilful and wayward. Perhaps he was so from his having been an orphan, from his having had no father's rightful authority to bow to, and no mother's love to soften with.

In his eighteenth year, he became a resident of St. John's College, Cambridge. There he was not very successful as a student, nor much interested. He appears to have been dissatisfied with the University, and with the nature of his studies, and not to have been altogether happy in himself. No doubt, in his time, the University was not a place to look well in the eyes of any earnest man. Yet perhaps to the end of his life Wordsworth was the worse for having failed of such mental discipline as he might and ought to have attained to, at his University, from its studies and its better men. He passed four years at Cambridge, without much profit or comfort; and then he left it, being a Bachelor of Arts, and twenty-one years of age. And if this was not all he was at that time, yet it was very nearly all he seemed. He was without a fortune, and without a profession, and apparently without much inclination or aptitude for business of any kind. Quite pure in character, altogether unpolluted by any of the debaucheries of Cambridge, earnest and meditative, but also independent in a way that seemed wilful, poor in property and prospects, and uncertain about what profession to adopt,—this was Wordsworth at twenty-one.

He was a poet; but, as a young man, he was not quite sure of it. There was in him a heart greater than he himself knew, or than his friends could well understand. To his eyes, as a poet, the world looked not

quite as it did to other people. And so, having to walk by his own eyesight, his way in the world seemed eccentric. He had wants, thoughts, wishes, feelings, likings and dislikes, different from what his friends had. And so he was strange to them. And while they thought him irresolute, and perhaps indolent, he felt himself called to, he hardly well knew what. At that time, if his mother had been living, it would probably have been very different with him. For with her love he would have grown more clear in his mind, and more decided in his aims, and would have been more readily reconciled to the untoward things of life.

He thought of adopting the profession of the law; but he judged that he had not either money or strength enough to succeed in it. By education he was qualified to be a clergyman; but he shrunk so much from the Church as connected with the state, that finally he determined to forego the Established Church and its golden offers, and endeavor to live by writing for some London newspaper. But while he was seeking some engagement with the newspaper press, a young man of his acquaintance died, and left him his fortune as a legacy, in the belief, that, with a life of leisure, William Wordsworth was capable of becoming a great author.

Wordsworth returned to Westmoreland to live, not till ten years after his leaving college. During that time he resided in France, at Crewkerne in Dorsetshire, at Alfoxden in Somersetshire, and at Goslar in Germany. It was about the year 1800, that he took up his abode at Grasmere, two miles from Rydal Mount, to which he afterwards removed.

But these ten years, what a time they had been for him mentally, — years of study, despised authorship, foreign travel, and experience of the French Revolution! They were years his whole nature was distinctly marked with, all his life after, for good and ill. They were the way by which, of a Radical, he became a Tory. There is many an inconsistency in Wordsworth's sentiments and conduct, of which these years are the explanation. From having had as a student no honor whatever for the University of Cambridge, he came to feel himself most highly honored in being admitted to Oxford. From having fancied the French Revolution was the cause of

heaven, he came to dread the sober and almost dignified movements of the Anti-Corn-Law League. From having thought that socially almost every thing was wrong in England, he came to hold that every thing was right, and even the gallows poetical. From having wished every peasant a share in the government of the country, he came to wish him ignorant of all learning but the Bible. And from having been an avowed republican, he became the Poet Laureate of the English monarch. So different he was in his manhood from what it seemed he would have become in his youth. Instead of the poet of progress, he became the poet of quiet, and instead of political reform, household order everywhere became his effort and prayer.

Very much it was from what he learned as a politician, that he became the spiritual poet that he was. He lived in France twelve months. He landed there in the month on which the National Assembly met. He was there during the September massacres. At Paris he attended the club of the Jacobins, and he picked up a stone as a memorial, from the ruins of the Bastile. And like a genuine Frenchman, he called himself a patriot.

"Bliss was it in that dawn to be alive,
But to be young was very heaven."

With the monarchy and the aristocracy, all oppression and wrong were certainly to cease. With republicanism there would be no sin anywhere, nor any temptation to it, but only and universally virtue; while everywhere there would be plenty and pleasure. Along with the wickedness of aristocracy, it was almost thought the mortality of man might cease. And very confidently it was expected that the millennium would begin from France. Wordsworth shared these expectations in all their grandeur and folly,—in their generosity and their emptiness,—in their fancied wisdom and their real delusiveness,—in the bright dawn they looked like, and the horrid night they turned to. His whole heart, his highest and most confident expectations, his holiest hopes, were in a social movement that seemed pure, just, and loving, but which ended apparently in worshipping the goddess of Reason, and incessantly working the guillotine.

For years after his return from France, he was haunted every night with dreams of carnage and executions. There were Englishmen who could scarcely be said ever to have smiled again, after having heard of the September massacres in France. Wordsworth's experience was like what made many an enthusiast of his age doubt God, and disbelieve the existence of virtue, and despair of the human race, and almost feel as though the grave were the only worthy certainty of man.

In consequence of his revolutionary experiences, Wordsworth became timidly, and almost absurdly, afraid of change. But in extenuation of his unreasonable conservatism let it be remembered, that he had once sympathized as a friend with the republican General Beaulieu, that he had hoped along with Madame Roland, and had known Robespierre; and that he had looked to see an altar rise for the French nation to worship at freely, and lo! in their midst there had been reared the guillotine. But as another, better effect of his frustrated expectations in regard to France, he came to think more of spiritual instincts than of political principles, and to value quiet more highly than excitement, and to know of God's agency among willing men, as being infinitely more efficacious for good than are the best contrivances of statesmanship.

Wordsworth was in his thirtieth year when he began his abode among the Lakes, where he resided afterwards full fifty years. And excepting what he accomplished as a poet, the chief events of all these years were his marriage, his becoming a father, his losing now and then a friend or a child by death, his making an occasional tour in Scotland or on the Continent, his visiting London sometimes, and his being created Poet Laureate.

His life was very largely that of the affections, and so was his philosophy. And so it was singularly fortunate for him that he had such a happy home as he had, and such friends as he had. He was married in 1802. His wife must have been a true woman. Forty years after their marriage, a friend remarked on Wordsworth's way of speaking to his wife, as being quite different from the tone of his usual conversation, — very sweet and warm, but delicate and reserved. It was of her that he wrote the stanzas of which the following are two: —

"I saw her upon nearer view,
A Spirit, yet a Woman too!
Her household motions light and free,
And steps of virgin-liberty;
A countenance in which did meet
Sweet records, promises as sweet:
A creature not too bright or good
For human nature's daily food;
For transient sorrows, simple wiles,
Praise, blame, love, kisses, tears, and smiles.

"And now I see, with eyes serene,
The very pulse of the machine;
A being breathing thoughtful breath,
A traveller between life and death;
The reason firm, the temperate will,
Endurance, foresight, strength, and skill:
A perfect Woman, nobly planned,
To warn, to comfort, and command;
And yet a Spirit still and bright,
With something of angelic light."

There is a poem of Wordsworth's, the subject of which is the recollection of a scene, in which once he suddenly noticed that the shore, from the lake up among the trees, was all covered with daffodils, glancing with the wind and sunshine.

"For oft, when on my couch I lie
In vacant or in pensive mood,
*They flash upon that inward eye
Which is the bliss of solitude;*
And then my heart with pleasure fills,
And dances with the daffodils."

The couplet in Italics are Mary Wordsworth's lines, and they betoken her to have been a woman that was truly "a help meet" for her husband, a great man and a poet though he was.

His sister Dorothy lived with him through his life. She was herself a poetess; and while her brother was a youth, and after his leaving Cambridge, she had a great and happy influence over him. She drew him from politics to poetry; and she sustained for him his courage amid the many disappointments and mortifications of his early life.

"She, in the midst of all, preserved him still
A Poet; made him seek, beneath that name,
And that alone, his office upon earth."

Coleridge and Southey were among Wordsworth's intimate friends. And so was Sir George Beaumont, who was said by Sir Walter Scott to have been the most sensible and pleasing man he had ever known. Others of Wordsworth's friends were the family of the Earl of Lonsdale, Sir Walter Scott, Charles Lamb and his sister Mary, Samuel Rogers, Felicia Hemans, and Joanna Baillie: and most of them were, in his own words,

"Meek women, men as true and brave
As ever went to a hopeful grave."

For his dwelling-place, Wordsworth had a spot that was both sweet and sublime. It was no long way from the lake of Windermere, and with woods and luxuriant valleys very near, and with mountains in sight, — Loughrigg and Wansfell. And here he lived; in his meditations and walks

"Haunted for ever by the Eternal Mind";

yet busy with daily work, and alive to all the occurrences of his neighborhood,

"And drinking from the well of common life,"

and finding — what is the sweetest, and also perhaps the rarest, of all sweet experiences —

"a serene delight
In closelier gathering cares, such as become
A human creature, howsoe'er endowed."

He had known something of the education which colleges can give; he had acquired not a little of the information which is gained by travelling; and he had shared in the greatest mental excitement the world had ever yielded. But at his home in Westmoreland he learned himself, and he taught others, what he wished that rulers too should know, that

"Wisdom doth live with children round her knees:
Books, leisure, perfect freedom, and the talk
Man holds with week-day man in the hourly walk

Of the mind's business : these are the degrees
By which true sway doth mount."

A wanderer as he had been, despised so long, disappointed so often, and then become so happy at the lakes, he used to wonder,—

"How strange that all
The terrors, pains, and early miseries,
Regrets, vexations, lassitudes interfused
Within my mind, should e'er have borne a part,
And that a needful part, in making up
That calm existence that is mine, when I
Am worthy of myself!"

As a youth, he had known what those clouds over the soul are that are the beginnings of the darkness of unbelief. And he had had befall him events more wretched than what the Divine goodness could easily be felt in. But as a man he attained to

"that blessed mood
In which the burden of the mystery,
In which the heavy and the weary weight
Of all this unintelligible world,
Is lightened."

And sometimes, of an evening, very blessed was the peace he felt, and very beautiful the holiness of his prayer.

"Teach me with quick-eared spirit to rejoice
In admonitions of Thy softest voice!
Whate'er the path these mortal feet may trace,
Breathe through my soul the blessing of Thy grace,
Glad, through a perfect love, a faith sincere,
Drawn from the wisdom that begins with fear:
Glad to expand, and, for a season free
From finite cares, to rest absorbed in Thee!"

At one time a student with fellow-students at Cambridge, at another time a dweller in London, and for a whole awful year a revolutionist in France, and then at last become a recluse among lakes and mountains, he knew of his own wide experience, what he taught, that as souls

“ We live by admiration, hope, and love.
And even as these are well and wisely fixed,
In dignity of being we ascend.”

Being of the nature he was, and living the life he did, and with such a wife and family and friends as he had, it is no wonder that, now in one way, and now in another, he explained and taught and urged, —

“ O, ’t is the heart that magnifies this life,
Making a truth and beauty of her own.”

Some of his opinions, that people were rather surprised by, originated in his anxiety that among social arrangements there should be large scope left for the affections. He was unwilling that a ragged mendicant should be suppressed and locked up in a comfortable poor-house, because he was so useful among the dalesmen, in drawing out their sympathies, as he went begging from house to house. He disliked that young children should be instructed in infant-schools, if in those schools they were to be secluded from their parents for six or eight consecutive hours in the day. For he judged it better a little child should simply grow in its mother’s eye, than learn ever so much quite away from her.

A spiritualist in philosophy, and a poet in character and work, — this was Wordsworth at the lakes ; earnest, too, and simple, affectionate and religious. As a poet, he proposed to himself not to amuse men, but to quicken for them the life of the soul, — to make them feel how wholesome quiet is, and yet how earnest it may also be, — to acquaint them with the beauty of every-day life, and the sweetness there is in common things, even as being common, — to open their eyes to a look, a meaning, there is in nature, that is divine, and quite other than what the eagle knows of, with his wide vision, — to inspire them, as his fellow-creatures, with confidence in the ways of the soul, and what they lead to, — and to make them specially attentive and trustful to those movements of the spirit that begin from God.

As it seems to us, the most distinctive of the characteristics of Wordsworth is what in its several manifestations is earnestness, simplicity, and sincerity. It is a quality that appears in his style as a writer, and in his use of words, — in the truthfulness of his sentiments, —

in the exactness of his descriptions of nature, — and in his choice of subjects as a poet. He denominates a small house a cottage, and not a rustic hall, as it used to be called in poetry. A nightingale he calls a nightingale, and not Philomel, as it once was. He early noticed that there were thousands of appearances in nature that had never been described at all in poetry, or else falsely so; and so he resolved to see nature with his own eyes, and to describe it in his own words. It seemed to him that often an inverted style, along with tumid phraseology, was substituted for real poetry; and so he determined himself to write as simply as he could. Then also it appeared to him, that it was a cheap, false, unprofitable way to poetic effect, to attempt it by means of subjects chosen as being odd, or marvellous, or splendid; and so he selected as subjects for poetry the things of daily life, occurrences among his neighbors, and those feelings that are commonest among men. For he was persuaded that poetry at its truest can sing better to a real child playing with flowers, than to an invisible and unapproachable monarch, crowned and robed and factitious, with nations for playthings. Only those ways and words and things would do for Wordsworth which he could be earnest with, and with which he could be simple and sincere.

In regard to his style, Wordsworth was right in forming it by the language of common life. Perhaps in this he was prompted chiefly by motives of simplicity and sincerity. And yet there was a wisdom in it, greater perhaps than philosophy yet knows of. Style, — O the mystery and the magic of it! As a subject, it is little understood. And so it is no wonder, the nonsense that has been talked about it. "Study the classics; for they are the models of style," says one man. "Read," says another, "read Jeremy Taylor, and Pope, and Robertson, and the great masters of English." While another advises, "If you want a tasteful style, read French." If you want to be graceful, move your limbs, and carry yourself, and smile, like some model of a man. Do it; and you will look ridiculous even in the eyes of your counsellor. And if in his understanding there were any eyes, your style of writing also would be ridiculous to him, were it really formed in the way he means, —

through Robertson, Pope, and Jeremy Taylor, or by the study of the classics, or by a taste for Voltaire.

Every language that is not a mere jargon has a style of its own, — a soul, a genius pervading it, — by which certain idioms are right, and certain others are not right, and by which, even in the adoption of foreign words, some are preferable to others, as being more easily assimilated. Indeed, it is so that every language has a genius of its own, growing out of sources mysterious, though, no doubt, the same that our souls themselves begin from. There are certain idioms that are universal on the lips of children, and that come from them in speech, apparently from some cause as universal as what their minds grow by. Now in the character of these idioms there is something that is more than chance, or than the mere effect of imitation. And it is what language is made vital by, and effective and lasting.

Between simplicity of style and truth of sentiment there is a greater connection in writing than is often thought. The affections refuse to speak Latin now. And if an Anglo-Saxon writes in a Latinized style instead of English, he writes what the feelings do not speak in, what there is no soul in. Though often this is what neither the writer nor the reader knows; for, uttered in hard words and inverted sentences and awkward constructions, most persons will accept for profound truth what they would laugh at, as empty truisms, if a child should speak it simply. But the language of common life is what nonsense cannot be talked in well; while also it is what is most expressive for wisdom and the soul. The language of common life, — it is the language of earnest; it is what passion speaks in, and love talks with; it is what hope, and surprise, and wonder make use of; it is what the truthfulness of childhood talks with, and what man, in his agony, cries, and pleads, and prays in.

It may be thought that a style derived from conversation is a way of writing that is more easy than scholarly. But it is not so. It is not easy at all, but hard, very hard. And for success in it there is needed such a multitude of aids as might well make even Coleridge speak as he did of "the wonderfulness of prose." These remarks are true not of prose only, but also of style in poetry. No

doubt, Wordsworth is often very diffuse in expression, and indeed even tediously so sometimes, but he is never obscure; never otherwise than simple. Perhaps in style he is the most natural of all poets since Shakspeare. Since the time of Shakspeare, how many poems have been published, and been popular for a season, and then been dropped as unreadable from their style, while Shakspeare's language has been perennially good. And why has this been? It has been because, of all other poets, Shakspeare wrote most nearly as he spoke; because his poems are in the same kind of words with which he wooed Ann Hathaway, and because his dramas are in the same idiomatic English in which he used to tell tales to his schoolfellows, when he was a boy at Stratford grammar-school. O the goodness and the lastingness of this language of every-day life! It is by it, beyond any other poet of his age, that Wordsworth is likely to be immortal.

Said Wordsworth to Coleridge, when they were both of them young, and earnestly hoping to do good among men, —

“Prophets of Nature, we to them will speak
A lasting inspiration, sanctified
By reason, blest by faith: what we have loved,
Others will love, and we will teach them how;
Instruct them how the mind of man becomes
A thousand times more beautiful than the earth
On which he dwells.”

Imagination is a quality which no mind can be quite without, and be human. But of all rare manifestations of the mind, perhaps the rarest is creative imagination, — what new truth comes by, or new feeling begins from; though most people think it to be only a trick of the mind, and what might be as common as pen and ink, for any reason there is in nature to the contrary. But then to these persons poetry consists in extravagant metaphors, startling ejaculations, and in a manner that is like the behavior of a Frenchman in love or a rage. They have a taste for poetry, as they think, if in queer descriptions they can recognize what things are meant, as they read along the lines. And to them the pleasure of poetry is the same as what children have in talking jargon, and

dimly guessing one another's meaning. But, notwithstanding the common opinion, imagination as a creative faculty is one of the rarest endowments among men. For one Jeremy Taylor, there are ten thousand writers on religion; and there might be a million such poets as Robert Montgomery for one Wordsworth. His faculty of imagination Wordsworth regarded as a trust confided to him. And he believed, too, that in the imagination as a creative power there is a something of inspiration. This opinion was not a new thing in him; for it was even held in the Christian Church, at the time when philosophers first began to throng its doors, with their early, earnest faith. And certainly, as a faculty, the imagination has its beginning from that side of the soul by which the Holy Spirit approaches man.

His imaginative faculty Wordsworth regarded almost religiously, and as though it were an entrance opened for him into the holy of holies; and in his conduct through life he was faithful to the magnitude and conditions of it, as a trust. Creative imagination is a mysterious power. To a great extent, it is independent of the will of its possessor. It will not serve him with any thing like the readiness of his memory. And it is so very unlike the logical powers, which will yield their service to a man any time, on almost every subject, and which can be relied on as implicitly as the muscles. Nor is it at its owner's will, to use at the prompting of every motive. Almost always it refuses to work for money. It will lend its aid to passion, but not for long, and never its best. It will not assist a man in opinions in which he is not sincere. It is significantly named genius. It is a something that is with a man, and yet that is not wholly his. It is at its best with him only when he is himself at his sincerest. And it will last on with him only as the Holy Spirit does, by not being grieved.

No doubt, there are some things in the lives and works of men of genius that look otherwise than this. But they are really of that exceptional character that witnesses to the existence of a rule. Genius will inspire a man at the instance of truth, or love, or gratitude, or religion, or the cause of freedom. But it will not help him in his selfishness, nor directly even in his efforts for a living. Nor even in the most likely cause is it to be relied upon

implicitly for help, like any other mental power. It will not apostatize from party to party with a man, for popularity. It will not sing its best, as a song, for a publisher's munificent offer. It will not accompany an advocate into court to plead an unjust cause, for a fee. It will not ascend the pulpit with a preacher, to aid him in any statement of opinion, if he does not believe it with his whole soul. It absolutely refuses to be made money of, or to be worked like a servant. There are vices it will dwell with for a while; but they are not those of calculating selfishness. And with hypocrisy it will live not at all. A man may sin, and sin again, and his genius not fail him, if again and again agony and remorse and repentance follow on his crimes. But as soon as a man can sin and feel easy, his genius begins to disappear. It is essential for genius that the mind it dwells in be pervaded by sincerity, in its opinions, feelings, and processes of thought, in its relations to the conscience, and in its manner of expression. To all the conditions of genius as a trust, Wordsworth was faithful. He did not attempt to make money of it. He did not try to earn popularity with it. He did not torture it into profitable flattery of some lord or monarch. He lived purely; and so he had it for his companion, all his life long. And he was content to live a life of quiet, listening for it against it should speak. His manner of life was simple. The ways of it were what he could be sincere in, and feel with his whole soul. Poet as he was, he lived as a poet ought.

For poems, Wordsworth selected such subjects as he could himself be most earnest in, as an immortal being. The soul, with God to visit it, and with the heavens to overarch it, and with a horizon of mystery to circle it about,—life as it throbbed in his own heart,—the human spirit, as it evinced itself in the deeds, the tears, the smiles, the talk of his neighbors,—Nature, overspread at times with a meaning greater than herself,—life as it felt in the living,—these were the themes of Wordsworth. While Rogers sung of the Pleasures of Memory, and of what Italy was in the past,—and Scott told of how the world was poetic once, in the days of Marmion, and the Last Minstrel, and the Lady of the Lake,—and, with his books about him, Southey narrated, in his fluent way, the wonders of other ages and other climes, the voyage of

Madoc, and the Curse of Kehama, — and at his ease in a drawing-room Moore sang of pleasure heightened by sin, and of life made beauteous with mirrors all about, and with the light of wax-candles to see by, — while Coleridge, after having sung one heavenly hymn, one touching ballad, and the doom of an Ancient Mariner, stopped with a shock, in the midst of Christabel, and turned to the world to argue, talking from metaphysical heights to bewildered admirers below, — and Shelley retreated from among men to sing of a world grown happy without a God, though trembling himself all over the while, a believer spite of himself, and even afraid of the dark, — and Keats wrote *Endymion* and *Hyperion*, like an ancient Greek, with *Hellas* to him all revived again, with its heroes, its gods, and its beauty, — and Campbell, after having expressed the Pleasures of Hope, told, in touching words, the horrors of war across the sea, and in the Highlands; himself, though, blowing every now and then a martial note on the trumpet, that all England echoed with. Byron, indeed, like Wordsworth, sang his own experiences, though under other men's names, *Juan's*, *Harold's*, *Manfred's*. But what was egotism in Byron, that would rather be Satanic wickedness than nothing, was such a very different matter from the simplicity and earnestness by which Wordsworth, on singing, could sing only out of his own heart!

With the exception of the *Ecclesiastical Sketches*, and a few other pieces, all the poems of Wordsworth are written in his own name. In them are recorded, almost one by one, his changes of feeling between the cradle and the grave, — his objects of affection at home, and what sorrows came into his house, — his thoughts on public events, battles, revolutions, the abolition of the slave trade, and the triumphs of freedom, — his steps, wherever he went, whether through Scotland, or up the Rhine, or about France, or to London, or to the Yarrow, or along the banks of the Duddon or the Derwent, to Tintern Abbey, or to the Cathedral at Cologne, — the name of almost every rock, brook, and valley of his neighborhood, — the birds about his house, the nightingale, the red-breast, the lark, and the cuckoo, — the look of the daisy and the celandine, — the feelings that came over him, one evening, with the twilight; and how he felt,

another evening, at the sight of Venus, as an evening-star, — little incidents in the lives of the peasants about him, — the earth's changes with the round of the year, — the friends he had, and their character, and his losses in them, as, one by one, they most of them died before him.

In all things, he felt the presence of another world interfused through this. To his ear, there was in the wind a voice from farther away than either the East or the West. To his eye, there was in the broad daylight another splendor than what the sun shone with. And out of the humblest flower there would rise for him thoughts more tender even than tears. And to him, the soul, a mystery in itself, and, as under the influence of the Holy Spirit, a mystery of mysteries, — there was not a movement of it, even in a child or a peasant, but what argued there being another world about him, more real than this visible, earthly one. He was himself one of that spiritual class of whom he said, —

“ Them the enduring and the transient both
Serve to exalt ; they build up greatest things
From least suggestions ; ever on the watch,
Willing to work and to be wrought upon.”

He sees a daisy, and there is a hint in it against the foolish anxieties of man : —

“ But thou wouldst teach him how to find
A shelter under every wind,
A hope for times that are unkind,
And every season.”

Deep among the trees, he heard the stock-dove coo, and to his ear

“ He sang of love with quiet blending,
Slow to begin and never ending.”

He sees a picture of a gleaner, and he is reminded of them

“ Who, whether from their lowly bed
They rise, or rest the weary head,
Ponder the blessing they entreat
From Heaven, and *feel* what they repeat,
While they give utterance to the prayer
That asks for daily bread.”

He sings of the four seasons of the year, and ends with the hope, —

“Such be our spring, our summer such;
So may our autumn blend
With hoary winter, and life touch,
Through heaven-born hope, her end.”

He notices a primrose growing in a handful of soil, on a rock, dying down every winter, but beautiful again every spring. And then he thinks, —

“Sin-blighted though we are, we too,
The reasoning sons of men
From one oblivious winter called,
Shall rise and breathe again;
And in eternal summer lose
Our threescore years and ten.”

Looking up through the tree-tops, he has glimpses of another sky than what is the blue firmament, —

“And while those lofty poplars gently wave
Their tops, between them comes and goes a sky
Bright as the glimpses of Eternity,
To saints accorded in their mortal hour.”

Himself he really did live, as he wished to have others live, —

“the consciousness
Of whom they are, habitually infused
Through every image, and through every thought,
And all affections by communion raised
From earth to heaven, from human to divine.”

Wordsworth quickens our souls into new feeling. Rare and precious effect! Sometimes, with his poet's hand, he touches our eyes, and we see things as they never looked before. And at other times he takes us up into a mount, next holy to that of the Transfiguration, and beneath us, and about us, all things are to be seen beauteous and altered and hopeful in the light of immortality. O the newness of life there is in his words, some of them! Purified with his expressions, love grows to be calm, and what feels eternal. Little trials and little cares grow sweet, with his wording of them. The dusty ways of common life, with his speaking of them, grow to feel like those that lead about Mount Lebanon, or that have

Carmel in sight. With his description, poverty is sanctified and thereby lightened; and duty is hallowed, and becomes what the soul can walk with in immortal strength. With his temper to learn in, reason becomes so sanctified, it feels like faith; and faith feels but like reason at its highest. With his prayers, some of them, to read, our own hearts grow more believing, and fitter for effectual fervent prayer. And with him for interpreter, as distinctly almost as in the times of the psalmists, the seas have great voices of praise, and sun, moon, and stars are to be heard worshipping God. With Wordsworth's help, we grow to be better believers than we were.

It was a happy phrase of Wordsworth's, — "exquisite regard for common things." And in making it one of his doctrines, he has rendered men a service that will be increasingly important. The more artificial some of the ways of life become, the more needful will it be to feel and to relish the simplicity of those ways that never change. And often Wordsworth, with his poetry, makes this simplicity be beautiful beyond the beauty of the most refined luxury. He makes it be what the most fastidious can love. And in doing this he renders a service that will be the greater the more useful shall become the results that science yields, so mighty at its work, and yet so delicate, — and the more beauteous the decorations for city and home that art shall elaborate, — and the more copiously they shall be brought for our use, the products of the land and the sea, luxuries from interior Asia, and the islands of the South Sea, from the busy workshops of Europe, and from afar down rivers that as yet are flowing in unknown channels, the Amazon, the Nile, and the Niger.

By the help of science and art, man may beautify his outward life. But for this what is he the better, if inwardly his life remains the same? A house better built, more commodious, splendid with the skill of science, luxurious with articles from a hundred countries in the East and the West, the North and the South, — what does it avail, if the dweller inside it be the same man he was? Refinements in furniture, food, and clothes are not what the soul is refined with. Nay, with more luxurious living, and with refinements even in speech and customs, the soul may grow more corrupt. For the feel-

ing of refinement may grow to be that of outward life only. It did become so among the ancient Greeks. With them every thing outwardly^{*} was refined to this beauty, in language, manners, buildings, and dress, while inwardly with them there was that grossness which St. Paul writes of. In view of this danger, and as corrective of a taste vitiated by luxury, the poetry of Wordsworth is of great and seasonable service.

By his poetry, Wordsworth is a benefactor of society in a way, apart from which art is sorrowful, and wealth is poor, and science almost worthless. For what would it be the better for man, though the cup of life were golden for him to drink from, and though it were wrought into a form graceful as a Grecian vase, if in the cup there were the same mortal mixture, and tasting none the more of immortal hope? And what though all life were made smooth as a path, for a man to walk on; and what though the tomb, at the end, were to become a mausoleum for this dead body to lie in grandly; and what though the coffin be made air-tight, and what corruption will not reach into, for ages; if while living he feel himself none the less earthy, and if, while walking it along, the way of this mortal life feel to him none the more surely immortal in its direction?

With Wordsworth, his imagination was very largely a corrective of the materialist and utilitarian character of his times. Love and worship were such very different things to him from what they were to Jeremy Bentham, or in Mill's *Analysis of the Human Mind*!

Does it appear to any one as though in this essay too much had been claimed for the imagination as a faculty? Yet it is not so. Perhaps an anecdote will best serve to demonstrate its excellence as a power.

Fifty years ago, it was proposed to sell the Parks of London, because of their having become so valuable as lands for building on. The proposal was debated in Parliament, and would certainly have gone into effect, but for a phrase of Burke's. Speeches were made against it, by practised and popular speakers, — men of round voices and round sentences. Philanthropists pleaded that the Parks should be maintained for the sake of salubrity. Others hoped they might be spared, because their ornamental character was essential to the completeness

of a city like London. Some others represented, that they were very desirable as places where persons might resort for change and recreation. But in spite of all these pleas, and in spite of other things, too, which orators said and tried to say, the Parks would have been sold, for the sake of the immense sums which they would have brought to the public treasury, only that they were saved by what every body felt the meaning of, so plain, and pathetic, and yet grand, — a name which Burke called them, — “the lungs of London.” That one phrase of genius availed more than twenty orators of Parliament. It drew public opinion to itself. It is now what the Parks exist by, — green, and beautiful, and healthy, and the delight of millions of people.

This is only an instance of the smaller services which the imagination yields. Yet it will serve to illustrate the general statement, that it is only with the help of the imagination that new truth gets access to the heart, or entrance into common life.

By Wordsworth, there is a higher and holier understanding of life and nature than there would have been but for him. And very largely by him the world’s best teachers are taught, — divines, and poets, and philosophers, — though his influence as yet is hardly more than beginning. O, how slow it was to commence! It will be long memorable, — the way Wordsworth was received by the world. Even up to the end of his life, he can hardly be said to have been popular. In the first half of his life William Hayley was Poet Laureate, and in the latter part of his life Robert Montgomery was the popular poet.

In the *Memoirs of Wordsworth* there is one blemish; and that is the presence of about one hundred and fifty lines by Robert Montgomery. They are printed by the biographer, who says he was favored with them by the author. Such tawdry verbiage as they are! But then, to be sure, Robert Montgomery is the more popular poet of the two. And so his lines on Wordsworth may have been accepted by the biographer, as some kind of a testimonial to his uncle. Some seven years ago, it was advertised all over London, that of Robert Montgomery’s *Satan*, and kindred poems, in ten years, three times as many editions had been sold as of Wordsworth in forty

years. A proceeding this which ought to have revolted from Robert Montgomery even the wife of his bosom! Yet it did not much revolt the public, and apparently Wordsworth's biographer not at all.

Even as late as 1833, of a new volume of Wordsworth's Poems there was probably not a single copy purchased in the whole county of Cumberland. Of what poems he had published when he was twenty-eight years of age, Longman, the publisher, once gave away the copyright, as a thing of no value. And at a time when Crabbe had made an easy fortune by his *Tales of the Hall*, *Parish Register*, and *Borough*, Wordsworth for his works had received almost nothing.

In the *Edinburgh Review* there were quoted for ridicule forty of the finest lines of the ode, the subject of which is *Intimations of Immortality*, from *Recollections of Early Childhood*. It is a poem in which Wordsworth writes in the spirit of the doctrine of the preëxistence of souls. For a time, and for poetical effect, he is a Platonist; and believes that

“ Our birth is but a sleep and a forgetting :
The soul that rises with us, our life's star,
Hath had elsewhere its setting,
And cometh from afar.
Not in entire forgetfulness,
And not in utter nakedness,
But trailing clouds of glory do we come
From God, who is our home.”

The whole ode is perfect. From the first line to the last, it is excellent. And at times there breathes in it an inspiration almost higher than that of genius. But of this great, grand composition, the following lines were quoted as being bad : —

“ O joy ! that in our embers
Is something that doth live,
That nature yet remembers
What was so fugitive !
The thought of our past years in me doth breed
Perpetual benediction : not indeed
For that which is most worthy to be blest ;
Delight and liberty, the simple creed
Of childhood, whether busy or at rest,
With new-fledged hope still fluttering in his breast ; —

Not for these I raise
 The song of thanks and praise :
 But for those obstinate questionings
 Of sense and outward things,
 Fallings from us, vanishings ;
 Blank misgivings of a creature
 Moving about in worlds not realized :
 High instincts, before which our mortal nature
 Did tremble, like a guilty thing surprised :
 But for those first affections,
 Those shadowy recollections,
 Which, be they what they may,
 Are yet the fountain-light of all our day,
 Are yet a master light of all our seeing :
 Uphold us, cherish, and have power to make
 Our noisy years seem moments in the being
 Of the eternal silence : truths that wake,
 To perish never :
 Which neither listlessness nor mad endeavor,
 Nor man nor boy,
 Nor all that is at enmity with joy,
 Can utterly abolish or destroy !
 Hence in a season of calm weather,
 Though inland far we be,
 Our souls have sight of that immortal sea
 Which brought us hither,
 Can in a moment travel thither,
 And see the children sport upon the shore,
 And hear the mighty waters rolling evermore."

For the ode itself, there was not in the *Edinburgh Review* one word of praise ; and the preceding lines from it were quoted as simply being ridiculous. The popular Reviewer ! There was revealed to him the very beauty of holiness ; and he saw it only to laugh at it. It was not one class only, but all classes in England, that rejected Wordsworth as a poet. O the scorn Wordsworth was to Episcopalian rectors, rich with tithe and glebe-land and oppression ! And O the strange ignorance of his name there was among the orthodox ! And, no doubt, it was not without some reference to Wordsworth, that Coleridge recorded his pain at the repugnance of English Unitarians to manifestations of the imaginative power.

Wordsworth was himself as noble as his poetry. Rightly understood, his *Memoirs* are a poem to read.

Among the public men of this century, perhaps there has been none more heroic in life than our author, — than Wordsworth, courageously waiting his time, though far off, — quite content to forego wealth, so he might live faithfully by his genius, — careless of the praise of men, from feeling himself stand so full in the eye of God, — conscious of his right to Hayley's laurels, and to payment better than what Crabbe received, or than Scott was enriched with, yet not embittered with ill-fortune, but calm and cheerful, — ridiculed by Byron, one of his earliest and greatest debtors, abused by hostile politicians, hindered by unworthy critics, misunderstood, neglected, yet patient and magnanimous, — meanly esteemed, yet writing in the spirit of a future, wiser age, — almost universally despised, yet over fields as wide as the English language sowing the world with seeds of good.

Remember what Wordsworth was in himself, and what the age was he lived in: and then he is sublime to think of. A man of such gentleness, and such endurance! A man reviled as darkling, while living in a light exceeding that of the sun. Wordsworth singing that Ode on Immortality to scornful men! — almost it is what ranks him among martyrs, even those of the early Church, that died for the Holy Spirit that was in them.

And now it is over, — his life and his work. And a soul like his, — let us hope it will never long be wanting in a season of necessity, — a spirit, that holds itself independent of the world that it is appointed to lead. Now, in his own words, let us say of the poet himself, what is so true, —

“Thou hast left behind
Powers that will work for thee: air, earth, and skies:
There 's not a breathing of the common wind
That will forget thee. Thou hast great allies.
Thy friends are exultations, agonies,
And love and man's unconquerable mind.”

So peculiarly and so exactly true! There are no other fitter words than these to end with, now!

W. M.

NOTICES OF RECENT PUBLICATIONS.

Christian Aspects of Faith and Duty. Discourses by JOHN JAMES TAYLER, B. A. London: John Chapman. 1851. 8vo. pp. 346.

OUR readers will need no introduction to the author of "A Retrospect of the Religious Life of England." In the volume before us, Mr. Tayler well sustains a most worthy reputation, and gives fresh assurance of being an enlightened and genial thinker, an accomplished scholar and writer, and an earnest Christian. The discourses, twenty in number, are exceedingly fresh and attractive, as well as able, discussions of the great problems of human life as seen under the light of Christianity, not according to by-gone aspects, but as they are presented to serious-minded persons in our times. Following the leading of the great Sermon on the Mount, the volume opens with an admirable discourse upon the "Spiritual Hunger and Thirst," that sense of spiritual and moral want, which the Gospel almost presupposes, and to which it ministers. Two following discourses illustrate, on the one hand, the approach of the soul to the Heavenly Father, the Source of help, and on the other hand, the drawing near of the Heavenly Father to his needy children on the earth. Then, in succeeding sermons, we read of the Mediator between God and men, of the "Harmony of the Divine and Human in Christ," of "The Distinctive and Permanent in Christianity," and of "The Footsteps of Christ." Through the remainder of the volume, the author pursues his great subject into various applications, relating, with three exceptions, viz. the discourses on "The True Expression of Human Brotherhood," "More Justice and Less Charity," and "Retrospect and Anticipation," rather to the inward than to the outward life. "Faith the Assurance of the Soul," "The Blessing of Sorrow," and "The Simplicity of the Heart," especially commended themselves to us as timely and wise and beautifully practical sermons, adapted in the main to the unlearned, as well as to the Christian scholar. The references scattered through the volume to various difficult social questions of the day are distinguished by a wise and most Christian humanity, as far removed from a cast-iron conservatism as from a crude and rabid radicalism. We wish to do the fullest justice to the merits of these sermons, for the truth's sake, and also because, contrary to our wishes, we must take some exceptions to their matter and manner. We would repeat that the

volume is characterized throughout by the tokens of a large and rich mind, profoundly penetrated by the spirit of Christianity. The preacher is no mere intellectualist or sentimentalist or rhapsodist, but one in whose culture the powers joined by God have not been separated; he is the slave of no party, not even of the liberal party. To use his own phraseology, he has shared the gifts at once of the prophet and of the philosopher; he is a believing and a discerning man, and, if he has erred in his search after the truth, is at least in the way to find it, because he is honest and earnest. No one can read these discourses without experiencing a pure and profitable pleasure. Nevertheless, with all deference to the reverend author, we must add to our admiring language a few words of criticism.

To the reverential, trusting Christian spirit of the sermons we would bear most willing and unqualified testimony, and yet from the doctrine of Jesus, as Mr. Tayler unfolds it, we must emphatically dissent. The author distinctly recognizes the supernatural element in our Saviour's being and life, and refuses to call him a *mere* man, but, on the other hand, he limits the indwelling of the Divine in the human far more than the facts or the philosophy of the case demand. In his view, the Lord is eminently the prophet of the race, endowed with the wisdom of the conscience and the affections to a transcendent degree, and yet not illumined beyond the measure of his times upon matters of science, &c., but sharing the local and national opinions. We suppose that in these opinions would be included the persuasions with reference to Satan, demoniacal possession, and the like. Now we can sympathize with the positive portion of this doctrine, but not with its stated or implied negations. Our view of the mysterious being of Jesus will not allow us to set bounds to his knowledge save where he has set them himself, and if it can be shown of any opinion that our Saviour entertained it, then, with our present light, we must say, it is more likely that we are in error if we hold it to be incredible, than that he was mistaken. Our present limits will not permit us to pursue a question which claims a volume for its discussion, but we have felt bound at least to record this objection.

Again, we gather from Mr. Tayler's pages, that, although he accepts the miracles of the Gospel, he makes little use of them as an aid to faith. This is far better than the hasty rationalism which, by rejecting them, entirely destroys, beyond all remedy, the integrity of the record, and breaks up the continuous thread of Gospel history into useless and disjointed bits, which we shall vainly try to weave again into a whole. But this view of the miracles is an unwise and unnecessary concession to the narrow, sceptical mind of our time, to a dogmatical incredulity which is

farther astray and more one-sided than the old superstition to which we fancy ourselves superior. On the whole, we do not believe that one can enter very deeply into the rationalistic spirit of the day, and at the same time be just to Christianity, as a "Word which came to us, and did not go out from us," which was attended by peculiar outward circumstances, and which must shape us, and not we it.

And yet again we must notice a want of a certain plainness, both in manner and matter, which must render these discourses less serviceable than could be desired to the less educated. They are occupied with questions which are trying the foremost minds of the day, and may be read by the scholar, or by any intelligent, reading man, with great profit. But we are sure that the great mass of our congregations, after hearing such sermons, would be obliged to confess that their humbler questions had not been met, and that their more homely wants had not been satisfied. At least they would need to read and study what they could only hear. The unresponsive eye too often shows that the preacher has overrated his congregation, and has not distinguished as he should between the dissertation and the plain sermon to the people, the harmonious development of his own thoughts and the attempt to present for the common uses of life the results and fruits rather than the processes of study. It is wrong, however, for us to make this complaint, since if, by chance, any one of Mr. Tayler's hearers has suffered in this particular, we have been the gainers a hundredfold.

Synopsis Evangelica ex quatuor Evangeliiis ordine Chronologico concinnavit, prætecto brevi Commentario illustravit, ad Antiquos Testes apposito Apparatu Critico recensuit CONSTANTINUS TISCHENDORF. Lipsiæ. 1851. pp. lxvi. and 202.

THIS *Synopsis Evangelica*, or Harmony of the Gospels, according to the appellation given in England and this country to a work of this kind, is a production which we have long desired to see, because it arranges the events of the life of Christ according to the Tripaschal hypothesis, or the supposition that the ministry of our Saviour was somewhat more than two years in duration. It has always appeared to us that the Harmony of Dr. Carpenter, which has been in general use among Unitarians, according to the Bipaschal hypothesis, which makes the duration of our Saviour's ministry but little more than one year, does violence to the Gospel of John. All the ingenuity of Dr. Carpenter has failed to convince us that the transpositions which his theory obliges him to make in the arrangement of that Gospel are allowable.

We believe that John states, and meant to state, that in our Lord's ministry there were three Passovers.

On the other hand, the Quadripaschal theory of Archbishop Newcome and Dr. Robinson, which has been most commonly received in this country, appears to us to ascribe a longer duration to our Saviour's ministry than is authorized by the Gospel of John. The objections to regarding John v. 1 as referring to a passover appear to us conclusive against the supposition.

Whether, however, the Tripaschal hypothesis be well founded or not, all scholars who are interested in the subject will be glad to see a work of learning and ability, in which the Gospel narratives are arranged on that plan. We have thus works easily accessible, viz. Dr. Carpenter's, Dr. Robinson's, and this of Tischendorf, on the three different hypotheses, the Bipaschal, the Quadripaschal, and the Tripaschal, which will enable theological students and others to study the subject with greater advantage than heretofore.

Tischendorf has prepared his Harmony according to the text of his critical edition of the New Testament, accompanied with its critical apparatus. He has also prefixed to it a list of the principal writers, ancient and modern, who have undertaken to write harmonies of the Gospels, a view of the principles on which his own work is constructed, and various remarks, illustrating the different questions which arise in relation to the subject throughout the Gospels.

It is not our purpose to examine the manner in which he has performed his work. Several things have occurred to us in a cursory perusal, in which our judgment differs from his. But the work is one of learning and ability, and, as we have intimated, gives the arrangement of the events of our Saviour's ministry according to the period of its duration best sanctioned by history. In regard to the religious benefit to be derived from the Gospels, it is, indeed, of little consequence whether the plan of Carpenter, Robinson, or Tischendorf be followed. But the duration of our Saviour's ministry is a subject upon which it is not unnatural, nor irrational, that curiosity should be exercised. We therefore welcome with great satisfaction the appearance of so valuable a work relating to the subject as that of Tischendorf. It can be imported into this country for something less than one dollar and a half per copy.

The Course of Creation. By JOHN ANDERSON, D. D. With a Glossary of Scientific Terms. Cincinnati: William H. Moore & Co. 12mo. pp. 384.

Not a few will say, we imagine, that the time has not come

for a fresh work upon geology ; that a longer interval should be allowed us for digesting the rich food which within the last few years has been so liberally provided. We hope, however, that no one will be prevented by any thought of this kind from reading this excellent and very intelligible work of Dr. Anderson. It is a popular treatise, and yet enters sufficiently into details to furnish the general student with a large amount of information. The author makes no vain boast of originality, but he is original in a very good sense, inasmuch as he has made his own by thorough and personal investigation the abundant materials which others have accumulated. The only novelty to which he lays any claim consists in "following the geographical sequence in the descriptions of the several geological formations." Beginning with the Grampians of his native land, he passes through England to France and Switzerland, the land of the Alps, — classic ground now in the eye of the geologist, — travelling not by easy stages, but *per saltum*, from peak to peak, or from cavern to cavern, patronizing the railways only when they pass through a deep cut or tunnel. The "journey under ground," unlike the pleasant satire, from the Danish, we believe, begins not from a garden on the surface of the globe, but from the rock foundations upon which this surface reposes, the solid pillars of the earth that sustain its beauty and glory, the massive substratum of granite. Administering to Paley a well-deserved rebuke for his contemptuous contrast between a stone and a watch, he shows that the despised stone can supply a sermon. We pass next to the Silurian division, (so called from the *Silures*, inhabitants of the districts of England and Wales, where the Silurian strata abound,) and find the first traces of organic life ; then we come to the Old Red Sandstone which Hugh Miller has made so famous, and are diverted by the way with a pleasant passage at arms between the said Miller and the Doctor, — the bones, or rather the skeletons, of strife being a genuine *Pterichthys* and *Pamphractus*, and our learned Agassiz being summoned as arbiter ; then on, through yellow sandstone and trap-rock, to the coal-basins which are to supply our houses and our factories and our locomotives with fuel for years almost without end. Seven chapters are devoted to the geology of England, and that of France and Switzerland is discussed under three divisions. Plants and fishes and beasts are successively, in due order of age, introduced to the reader, and lest our faith should fail us, as wonder after wonder is narrated, and the strangest shapes, "if shapes they can be called, which shape have none," are described, we are pointed to fossil remains and enormous tracks and huge skeletons, and are even enabled to follow the courses of most venerable reptiles through mud and mire. Let no one ever

again be sceptical, for Mr. Agassiz has announced it as highly probable that fishes once walked. Somewhere in Pennsylvania it was so, in very ancient times. Our author contributes his proportion to the able argument of Mr. Hugh Miller against the author of the "*Vestiges of Creation*," urging the very wide intervals that prevail between the different classes of fossil animals which have thus far been found. Those who have felt any solicitude about the subject will be greatly relieved to learn that the interval between the most sauroid of fishes and the *Ichthyosaurus* can hardly be diminished. The fourth part contains a very interesting discussion of some of the general points of the science, and a geological *exegesis* of the first verses of Genesis. We were very much delighted to find in print, from so respectable an authority, what has often occurred to us as an humble suggestion which we hardly dared to express, we mean a doubt whether the confident statement that sixteen millions of years have elapsed "since the creation of life upon the earth" does not need confirmation. Dr. Anderson thinks that this estimate may be correct within some *millions*. We wish that we had enough science to examine some other scientific *demonstrations* put forth with great confidence. The author dissents from the view of the Mosaic record which throws back all geological discoveries to an anterior period, and so dispenses the scholar from any considerable attempt at reconciliation. According to him, the "days" are periods, like those "days of the Lord" which are as "a thousand years," and Moses gives a poetical and popular account of the grand creative process. We remember to have heard an exceedingly interesting lecture by Professor Mitchell of Cincinnati, in which Moses detailed the cosmogony according to the nebular hypothesis. Attempts of this kind are very interesting, and often a wonderful accordance is established between the old language and the modern theory. We cannot say how much light upon this subject may have been divinely communicated to Moses, rescued for him out of the primeval time which grows more and more mysterious the more we think about it, but we should be sorry if our faith in him who wrote of Christ depended in the least upon the accuracy of his geological information. It was enough for him to tell the idolater that God, and not Baal, made the world; for the knowledge of the process they might well wait until Solomon should give names to plants, or even longer.

We were much pleased with the suggestion advanced by the author, by way of apology for having taken time from theology for natural science, that it would be well if the leisure hours which are so often passed in listlessness were so filled up. An occupation which leads one into the open air is an invaluable

friend to the student. An added task does not necessarily imply any neglect of prior obligations. If we have any fault to find with the style of the book, it is only this, an excess of "*improvement*," with a use of what are at best only illustrations as if they were arguments. We presume, however, that the occupant of Newburgh manse is a preacher as well as a geologist, and entitled for this reason to some allowances.

Life and Manners: from the Autobiography of an English Opium-Eater. By THOMAS DE QUINCEY. Boston: Ticknor, Reed, & Fields. 1851. 16mo. pp. 347.

THE life of Mr. De Quincey is full of warning and instruction. Born about the year 1785, in that position in society which is commonly regarded as the most favorable for moral and intellectual growth, and gifted by nature with a mind at once singularly acquisitive and singularly retentive, his early education, though injurious in some respects, was well calculated to develop his various faculties. His father died when he was only seven years old, and he was thus deprived of that watchful care which would have been so advantageous to him. But his mother seems to have been ever mindful of his welfare, and to have faithfully endeavored to supply the want of paternal control to the best of her ability. After attending various private schools he was sent to Eton, and subsequently to Oxford, to complete his education. He was, however, left not a little to his own guidance; yet it is evident that he improved every opportunity of storing his mind with those vast treasures of learning and observation which characterize all his publications, and render him hardly inferior to Lord Brougham in versatility of powers. There is scarcely a subject in the whole range of classical or modern literature which he has not at one time or another mastered. History, biography, criticism, political economy, theology, fiction, — all have owed something to his pen; and he has touched no subject which he has not adorned. At one of the earliest schools that he attended he gained a prize for a metrical composition, and at Oxford he was especially distinguished for his uncommon proficiency in Greek. Nor is his acquaintance with intellectual philosophy, modern languages, and the physical sciences less thorough and exact.

No one could give a more brilliant promise, and few of his contemporaries have surpassed him in actual attainments; but his one vice of opium-eating has cast a blight over his life. At an early age he formed this pernicious habit; and his mind, alternately laboring under a feverish excitement, and sinking under an unnatural depression, lost its healthy action, while his bodily

vigor was permanently impaired. Well did Coleridge say of himself, in a letter to Joseph Cottle: "Conceive whatever is most wretched, helpless, and hopeless, and you will form as tolerable a notion of my state as it is possible for a good man to have." The same was true of Mr. De Quincey; and he saw it. By an extraordinary effort he at length threw off the wretched practice. But its results are still visible. Whatever defects are discoverable in his style are to be traced directly to this habit. It has disturbed the proper balance of his mind, and rendered his productions too often fragmentary and discursive. It has weakened that mighty influence for good which he might have exerted with his great powers; and which he doubtless has exerted to a considerable extent. It has embittered his own life, and in a great degree withdrawn him from the sympathy of others. The lives of Coleridge and De Quincey are memorable instances of the effects consequent upon an unrestrained indulgence in this worst form of intoxication. It is not easy to estimate the position which they would have held if they had lived as spotless lives as Wordsworth and Southey. Yet it may be considered nearly certain that they would have occupied a much higher rank than either of those writers; but as it is, neither has left any adequate memorial of himself.

One chapter of Mr. De Quincey's experience has long been familiar to the public in the Confessions of an English Opium-Eater. In the present volume we have an account of his childhood and youth; and the remaining portions of his autobiography will be comprised in two volumes of Personal Recollections. The part now before us is less eloquently written than the Biographical Essays; but the original matter which it contains, and the reminiscences of former days, particularly those referring to the Irish Rebellion and to his residence at Oxford, render it not less interesting than those brilliant and powerful papers. The remarks on German literature are also deserving of especial notice.

A Collection of College Words and Customs. Cambridge: John Bartlett. 1851. 12mo. pp. 319.

TILL we had turned over several pages of this volume we were wholly sceptical of the sufficiency of the subject-matter to make a book. But we have been pleasantly engaged by its perusal, to a degree exceeding the measure of interest which the large majority of our modern publications excite. The unknown editor has done his work well, and made it fruitful and instructive. He has introduced a great deal of historical information, as any one may see who will refer to the words, Buttery, Class Day,

Commencement, Commons, Corporal Punishment, Dress, Fines, Freshman Servitude, Manners, Prayers, Seventy-Eighth Psalm, etc., etc. It will be evident from what is suggested by these words, that the volume is by no means a mere collection of slang terms used by college students, but even has something of the dignity of a literary vocabulary, and of an academical dictionary. Full justice, however, is done to such matters as the *Med. Fac. Society*, and the *Navy Club*, and the *Jack-knife*, which only the initiated can fully understand. If the book should go to a second edition, which ought to be and doubtless will be the case, we hope the ingenious editor will enlarge the historical and antiquarian notices, as he has given full proof of his ability to do in a most interesting manner.

The Works of John Adams, Second President of the United States: with a Life of the Author, Notes and Illustrations, by his Grandson CHARLES FRANCIS ADAMS. Boston: Little & Brown. 1851. Vols. III., IV., and V. pp. 576, 588, 496.

THESE elegant volumes, which are fair specimens of the productions of our first publishers, continue the series of works already announced in our pages. While waiting for the first volume to appear before we enter upon any extended notice of the work, we will give the contents of the volumes now in our hands. Volume III. contains the remainder of the fragment of Autobiography, a Diary, Literary and Political Essays and Papers, and Controversial Papers of the Revolution. Volume IV. contains *Novanglus*, and Works on Government, embracing an historical review and critique. These are continued in Volume V., which is also illustrated by a finely engraved full-length portrait. It is now time that the literature of our Revolution should be presented in a form suited to attract a new generation of readers, and to offer a complete view of the men and events of that era in the light of candor and justice. Even our school-boys need something better than the superficial and often fictitious matter which is read in our class-books. We receive these volumes, therefore, with gratitude, and shall value them highly.

A Popular Cyclopædia of Biblical Literature, condensed from the larger Work. By JOHN KITTO, D. D., F. S. A. Assisted by Rev. JAMES TAYLOR, D. D., of Glasgow. Illustrated by numerous Engravings. Boston: Gould & Lincoln. 1851. 8vo. pp. 800.

WE have seen and examined Kitto's complete work, and regard it as admirably adapted to supply a want which all attentive

readers of the Bible feel on the perusal of each chapter. The principle upon which this abridgment is made is, by omitting matters intelligible or desirable only to scholars and critical students, and retaining all the illustrative and instructive contents, to reduce the compass of the work one half, and thus to make it all that is needed by the majority of readers. This condensation has been effected by the author himself. He is perfectly qualified for the work which he has undertaken, as the principal labor of his life has been given to gathering materials for it. The American publishers assumed no slight risk in issuing this substantial volume, but they will be abundantly recompensed if the merits of the work can be made known to those who are looking for something of the kind. No such work can be free from defects. We would that all were as little faulty as this.

Travels in the United States, etc., during 1849 and 1850. By the LADY MARY WORTLEY. New York : Harper & Brothers. 1851. 12mo. pp. 463.

THE writer of this book was in good humor, and moved by a kindly spirit. She does not appear to have been imposed upon by large and silly stories, told to her for the sake of *humbugging* her, so often nor to such an extent as are most English travelers in our country, of either sex. Whoever informed her, however, that the young folks in Boston were in the habit of discharging loaded pistols at each other, as a part of the celebration of the anniversary of Independence, tried upon her successfully a trick of the frequent practice of which we find ludicrous evidence in the journals of all who have preceded her. The authoress makes a free use of names, and enters into many particulars of merely private concern. But she evidently was led by a good purpose, and saw what passed under her eye with the intention of making a fair report of it. Her book will be pleasant reading to many who are not convinced by Dr. Johnson's Essay upon the folly of wishing to know what others think and say of us. The lady passed over too much space in too brief a time to give to her remarks any more value than that of easy and good-humored gossip.

A History of the Church in Brattle Street, Boston. By its Pastor, SAMUEL K. LOTHROP. Boston : Crosby & Nichols. 1851. 16mo. pp. 218.

THE admirably thorough and comprehensive historical discourses by Dr. Palfrey, when pastor of Brattle Street Church,

have left but little of chief interest in its annals to be learned or presented by a successor. But Mr. Lothrop has given us some very engaging discourses, which mingle moralizing and sermonizing with a review of the records of the past. The church has a history which will bear repetition. It has been served by eminent and faithful pastors. Its origin marks an important phase in the ever-changing religious aspect of Massachusetts, and events have transpired here which are in various ways interwoven with the records of all of our churches, with that in Brattle Street in an especial manner.

The Silent Pastor ; or Consolations for the Sick. By THOMAS SADLER, Ph. D. A New Edition, much enlarged. London : E. T. Whitfield. 1851. 16mo. pp. 224.

THIS little work having already proved itself, both at home and abroad, suited to perform a holy ministry to the suffering, now appears again in a form which adds to its value. Some of the choicest utterances of piety and trust, under the experience of trial borne with Christian submission, are here gathered together. There is enough of variety in the different pieces to express the strains of several hearts under similar discipline. Prose and Poetry, the Essay, the Sermon, the Meditation, the Prayer, the Psalm and the Hymn, from writers whose lives were fragrant, and whose works have secured a currency not bounded by sectarian folds, are found upon the pages of Dr. Sadler's volume.

Lectures on the Lord's Prayer. By WILLIAM R. WILLIAMS. Boston : Gould & Lincoln. 1851. 12mo. pp. 241.

THE author's reputation for fervid eloquence is borne out by this new volume from his pen. He allows himself a wider range of allusion and illustration than do most preachers, but he enchains the thoughts and kindles the sentiments which he addresses.

Sketches of European Capitals. By WILLIAM WARE. Boston : Phillips, Sampson, & Co. 1851. 12mo. pp. 320.

THOUGH the title of this book might lead a reader to expect that a larger number of the cities of Europe were to be noticed in its pages, he will find himself more than compensated by the amount and variety of description relating to a few of them,

which are embraced under the modest word "Sketches." Rome, Florence, Naples, and London are the themes of the volume. Some of our city readers have already enjoyed the pleasure of partaking with the author in his delightful sketches of these cities when he delivered the substance of this volume in lectures. To others we will say, that there is a charm in these pages which will greatly raise their interest in perusing them. Every observer sees different sights in the same place. Every thinker thinks different thoughts upon the same subject. According to the taste, genius, fancy, knowledge, and skill of each person who describes what he has observed, and writes what he has thought, will there be degrees and variety of interest in what he offers us. We need not say how Mr. Ware's own genius and grace have adorned his themes, nor how admirable are his criticisms on art, and his incidental moralizings.

English Literature of the Nineteenth Century: on the Plan of the Author's "Compendium of English Literature" and supplementary to it. Designed for Colleges and advanced Classes in Schools, as well as for Private Reading. By CHARLES D. CLEVELAND. Boston: Phillips, Sampson, & Co. 1851. 12mo. pp. 746.

Hymns for Schools, with Appropriate Selections from Scriptures, and Tunes suited to the Metres of the Hymns. By CHARLES D. CLEVELAND. Boston: Phillips, Sampson, & Co. 1851. 24mo. pp. 270.

THE former of these two new school manuals is a very judicious compilation of extracts from the more prominent English writers of the present century. The selections are made with discretion and taste, from a large number of authors. Brief biographical and critical notices introduce the pieces of each. The book will serve to foster a taste for reading, and lead many who peruse it to acquaint themselves more fully with the respective authors.

The second book is of rather more questionable utility. Though it is skilfully put together, contains most excellent hymns attached to excellent texts of Scripture, and is designed to suit each day of the year with something appropriate to the season or the historic associations of the day, yet we cannot say that it meets our conception of a manual for singing in schools. Perhaps we have acquired some pulpit associations with some of the hymns, which lead us to regard them as rather unsuitable for the generally gleeful, undevout, and thoughtless crowds in a school-room, upon whom it is so difficult to impress the *humanities*, to say nothing of the *spiritualities*.

INTELLIGENCE.

LITERARY INTELLIGENCE.

THE Messrs. Harper of New York continue their series of Abbott's Biographies, by one of the Empress Josephine. Her interesting and sad story is told in a way well suited to engage the young, while several respectable engravings speak to the eye. This series has been received with great favor in England, as well as in this country.

The Harpers have also reprinted from the English edition Otté's translation of the third volume of Humboldt's *Cosmos*, a Sketch of the Physical Description of the Universe. The grand generalizations of this work, as well as the particular facts of science which it embraces, will better than any other book inform a general reader of the present attainments and limitations of physical philosophy.

C. H. Peirce & Co., of Boston, have published a second series of the *Memorials of the Early Progress of Methodism in the Eastern States*, by Abel Stevens. The work contains biographical notices of preachers, and sketches of the formation and struggles of the churches of that denomination. The true evangelical zeal and devotion find many heart-moving illustrations of their power in these pages. The book should feed the faith and piety of a new generation.

A. D. T. Randolph, of New York, has republished a little book under the double title of "*Fruits of Leisure; or, Essays written in the Intervals of Business.*" Four editions of this book, under the latter title, have been published in England. It was the first work by which we were made acquainted with the author, Mr. Helps, whose subsequent writings, particularly his "*Friends in Council*," and "*Companions of my Solitude*," have been received with marked favor in the world of literature.

Phillips, Sampson, & Co. have now issued, complete in forty-seven numbers, their splendid edition of Shakspeare. The type and paper, the choice engravings of the author's heroines, and the admirable apparatus of notes and illustrations which mark this edition, make it every way worthy of the encomiums which have been bestowed upon it.

D. Appleton & Co., of New York, have published a new poem by T. S. Fay, under the title of "*Ulric; or, The Voices.*" The author has established his reputation as a tasteful and spirited writer. There is poetry, fine language, and true sentiment in this volume, and, above all, a good moral, which can be learned only by reading the tale, — one that has interest apart from its rhythm.

Professor Park gives us in the *Bibliotheca Sacra* for July (printed also in a separate form) another rejoinder to his Princeton Reviewer, under the title of "*Unity even on Imputed and Involuntary Sin; with Comments on a Second Article in the Princeton Review relating to a Convention*

Sermon." Nominally this controversy relates merely to the rhetorical use of words. But it is obvious that the two disputants, at least, have in view something of higher import than the scope of metaphorical language.

The Discourse delivered by Rev. Dr. Furness, at the Ordination of Mr. Charles E. Hodges at Barre, has been published by Crosby & Nichols. It bears the title "Faith in Christ," and after a vivid statement of the perplexities which have gathered about that condition of discipleship, and a very simple definition of its terms, the preacher proceeds to apply them to the demands which are at this day made upon disciples.

A Discourse on the Unity of God, delivered in 1850 before the Charleston Unitarian Book and Tract Society, by S. Gilman, D. D., has been published in that city, together with the Managers' Report on the Thirtieth Anniversary of that Association. The pamphlet is worthy of a wide circulation, as the Discourse presents its great Scriptural truth in the forcible and candid manner most suited to work conviction.

Story Association of the Dane Law School.—The first celebration of this new Society of the Alumni and Members of the Law School at Cambridge, took place on Tuesday, July 15. The exercises consisted of Prayer by Rev. Dr. Walker, an Oration by the Hon. Rufus Choate, and an Ode by the Hon. George Lunt, in the First Church. The members then dined together in Dane Hall.

Harvard College Commencement.—The halls of Harvard have now witnessed more than two hundred Commencements. How much would it have aided the effect of this anniversary at the present day, if our fathers had had the means for erecting one solid structure, which, by its quaint and antiquated aspect, might have been a visible memorial of their own bodily presence at the first Commencement in 1642. We have not that dread which some persons entertain of a donation to a college locked up in stone and mortar. We suppose, indeed, that the objection to such a use of pecuniary bequests has been greatly strengthened, if not created, by the frequent waste of money upon unsightly and merely temporary structures. Considering the amount which the treasury of Harvard annually expends in altering and rearranging its edifices and lecture-rooms, we are satisfied that it would have been the gainer if some proper and enduring structure had been erected one or two hundred years ago. We would venture to commend to any liberal-minded man of wealth who meditates a gift to the College, that he devote it to the erection of a solid and sightly building, arranged for the reception of the libraries and cabinets of the various societies among the undergraduates, and for their regular meetings. A considerable sum of money is now accumulating by interest for the erection of a suitable chapel.

The weather on Commencement day (Wednesday, July 16) was more comfortable than is usual, and the church was filled, as it undoubtedly would have been if its capacity were doubled. The Governor and suite were escorted to Cambridge by the Lancers. The Overseers, meeting in the Library Hall, assented to the several proposals of the Corporation for bestowing the degrees which belonged as a matter of

course to the various graduates of the day. Of these, sixty-one members of the Senior Class received the Degree of Bachelor of Arts; thirty-two Alumni that of Master of Arts, twenty-three that of Doctor in Medicine, twenty-eight that of Bachelor of Laws, and four that of Bachelor in Science, which last honor was conferred for the first time, as a token of the first fruits of the Lawrence Scientific School.

The exercises in the church were of a character to answer all reasonable expectations, some of the *parts* exhibiting vigor and skill, while all were of a high literary standard. It becomes all mature persons who listen to such performances to consider what they ought to look for, and what ought to satisfy them as conformed to the spirit of the occasion, and to the age and circumstances of the speakers. Any thing very brilliant, positive, or independent from their lips would be pronounced pert or flippant, while very proper and judicious sentiments are called tame and commonplace. Practical men, especially some who had not the training of a college course, will often complain of the exercises at Commencement as being too much devoted to classical themes and past and foreign characters and events, to the neglect of present and domestic topics. But old wisdom is the surest and the safest, and he that looks for the morals of ancient characters and incidents, will find more in them to instruct him than in any crude dealings with the agitations and controversies of our own day, especially if young men are to speak upon them for five or ten minutes each.

The following Honorary Degrees were conferred by the President in behalf of the Corporation. That of Doctor of Divinity upon the Rev. Alonzo Hill of Worcester, Rev. Rufus Phineas Stebbins, President of Meadville Theological School, Rev. John A. Albro of Cambridge, and Rev. Stephen H. Tyng of New York. That of Doctor of Laws upon His Excellency George Sewall Boutwell, Governor of the Commonwealth of Massachusetts; Sylvanus Thayer, Colonel of Engineers, U. S. A.; Alexander D. Bache, Superintendent of the U. S. Coast Survey; Joseph Henry, Director of the Smithsonian Institute, Washington, D. C.; John J. Crittenden, Attorney-General of the United States; Benjamin F. Dunkin, Chancellor of South Carolina; and John A. Lowell, of Boston.

The Honorary Degree of Master of Arts was conferred upon Rev. Nathaniel Hall of Dorchester; Ormsby N. Mitchell, Director of the Astronomical Observatory at Cincinnati, Ohio; Simeon Borden of Fall River; William R. Lee of Roxbury; Jonathan Kimball of Lowell; James Rhoads of Philadelphia; and John D. Runkle of Cambridge.

The tables in Harvard Hall were crowded by the Alumni at dinner, a blessing having been invoked by Rev. Dr. Kendall of Plymouth. The usual psalm — the Seventy-eighth of the Old Version — was sung, under the lead of Mr. John L. Sibley, the Assistant Librarian. President Sparks then resigned the chair to the Hon. Edward Everett, who, as President of the Association of the Alumni, introduced with appropriate remarks a list of those of the graduates who had deceased during the closing academical year. Of these, the number, as far as had been ascertained, was forty-three. Mr. Everett gave their names in the order of their graduation, with brief biographical notices, leaving to any classmate or friend to follow him at the close of the enumeration by more extended notices. Mr. Samuel Payson, of Charlestown, though not the oldest in years, was the oldest in the order of graduation who had

died during the year. He belonged to the class of 1782, was the son of the Rev. Phillips Payson, predecessor of Dr. Tuckerman in the church at Chelsea, was for many years a teacher in Charlestown, and for nearly a quarter of a century cashier of the Massachusetts Bank in Boston. He was a man of many virtues, of sterling integrity, of great benevolence, and of a most winning and guileless simplicity: one of the honored gentlemen of the old school, and a Christian of the only true school. He died January 10, 1851, leaving his classmate, the Hon. John Welles of Boston, to be the College Nestor. There are survivors in every class down to the present year.

Ex-President Quincy rose to say a few words in commemoration of two of his classmates, — 1790, — whose names were on the list, though he had not known the fact of but one of them, till that moment. They were Benjamin Hasey, of Topsham, Me., and Peter Holt, of Greenfield, N. H. It was impressive and delightful to observe the stillness of the large audience, as, with all the freshness of youthful remembrance and sensibility, the venerable speaker recalled his companions of sixty-five years ago, when they entered upon their college course.

The Hon. Charles G. Loring, of the Corporation, gave a respectful and affectionate tribute to a deceased classmate.

The whole number of Graduates of Harvard College is 6,342. Of these, there are supposed to be living 2,177. Alluding to the usage by which, in the College Catalogue, an asterisk is affixed to the name of a deceased graduate, and to the summary mention in the words, "E vivis cesserunt Stelligeri," Mr. Everett asked why we might not say of those who have left us, "In vivos accesserunt Stelligeri."

The Triennial Catalogue, which is published this year, makes a large increase in size at each successive appearance. The present one includes for the first time the graduates of the Theological School. We cannot but commend the care and pains which have recently been spent upon this Catalogue to ascertain all the honors which the graduates have borne in life, and the distant dates of the decease of many of them. The eagerness with which this pamphlet was sought after on Commencement Day is a token of the interest of the Alumni in their *Alma Mater*.

After the usual time of social intercourse had been spent around the tables, the Association of Alumni met in the hall above, Mr. Everett in the chair. The officers were reelected, except that the place of Secretary was filled by the choice of Dr. Shurtleff of Boston, the Rev. S. K. Lothrop being abroad. It was announced by the committee that they had continued their efforts to secure a literary festival for the Alumni, and that a request was to be made of the members of the Phi Beta Kappa Society that they would, on alternate years, yield the day following Commencement to the use of this Association. At the meeting of the Phi Beta Kappa on the next day, this request was cordially acceded to; so that we may look for a pleasant occasion with all proper accompaniments in the academic week of 1852.

Changes in College Professorships. — Several changes have taken place in the College during the academic year by the termination of the labors of three professors, and the introduction of new incumbents in their respective places, as well as by new appointments to tutorships. The Erving Professorship of Chemistry and Mineralogy is now filled by

Josiah Parsons Cooke, whose nomination has been confirmed by the Overseers, and who is at present in Europe. Dr. Charles Beck, having filled the Professorship of Latin for eighteen years, resigned it last year, after a term of most faithful and effective service. With all the advantages of his German training, and of his long devotion to his chosen study, he must be admirably furnished for the work of facilitating to others the labors of his own life. We hope that his easy and well-earned leisure will be spent in some attractive works which he can so well adorn by his ripe scholarship and his profound attainments. The Corporation have nominated in place of Dr. Beck, Mr. George Martin Lane, a distinguished classical scholar of the class of 1846. He also is now in Europe, pursuing the studies for which he had a taste from his earliest youth, and in which he has sought the advantages of Continental universities. His return to commence his labors with the next college term will be warmly welcomed. Mr. Edward Tyrrel Channing, having been appointed Professor of Rhetoric and Oratory in 1819, has most faithfully and laboriously discharged his duties till he resigned the office at the close of the last term. His duties have been as onerous as those of any officer of the College, requiring a diversity of tasks and a kind of work which have made large demands on patience. To one whose taste might lead him to choose only the best compositions in the language, it must have been a somewhat irksome task to correct the themes of students, to read over every week a pile of letter-sheets, — such as they are, — written in every conceivable strain of flatulency, bombast, stilted extravagance, commonplace, or inanity, with occasional, perhaps not rare, specimens of genius. To find the subjects suited for themes for so many writers requires some considerable pains. To be able always to discover when a student has preferred to be indebted to some writer already in print rather than to draw upon his own brain, implies a considerable amount of reading and an acquired watchfulness. It is easy to imagine that a college professor in this department might need to be constantly alert and well furnished with a large charity for tyros, as well as disposed to extend to the utmost limits of allowance all the phenomena which could be brought within the compass of the fact, that the same thought, and even the same words, may occur to two or more writers when dealing with the same subject. There is even a tradition that the excellent Professor was once astounded by the presentation of the same theme in duplicate by two young gentlemen of the same class. The youth who began each line with a capital letter, and who met the suggestion of the Professor, that it was not well to have his *sentences* all of a length and all so short as they appeared to be, by announcing that the theme was written in blank verse, must have been relieved by the exclamation, "Oh! *Poetry?* Is it? O, that accounts for it!" But who of us that has passed under the discipline does not rejoice over it? Who of his pupils does not remember with gratitude the pruning skill and good taste shown in the suggestions of the Professor, and smile inwardly at the remembrance of his good-humored, but sometimes keen, criticism upon bathos, vulgarism, or nonsense? "What makes you read that sentence aloud, and emphasize it in so marked a manner?" has doubtless been the question suppressed only by the teeth of many a nervous sufferer, when an unfortunate passage has been uttered in the hearing of laughing classmates. Yet the discipline, the humor, the almost drollery and raillery, were all good. We return our cordial and

most respectful thanks for our share in them. How many pages in this periodical — indeed by far the larger part of them — have proved, unworthily though it may have been, the care and effort which the Professor has spent upon his thousands of pupils! We fear lest we have trespassed upon some one of his good rules even in what we have written with the intent of offering a grateful tribute to their honored teacher. The retiring Professor was most happily complimented by the Rev. Samuel Osgood of New York, at the dinner of the Phi Beta Kappa Society. May all kindly and cheerful companions, within and without, attend upon him, and may he enjoy the sweet delights of “idle time not idly spent,” while he shall contemplate “the pleasant countenance of truth in the quiet and still air of delightful studies.”

Professor Channing's place has been supplied by the nomination of Mr. Francis James Child, now in Europe, who was a graduate of the class of 1846, and who, by his discharge of the duties of Instructor in the department which he is to fill as Professor, has already secured the high regard of the College officers and students.

Phi Beta Kappa Society. — The Anniversary of this Society took place as usual, on the day following Commencement. It was known beforehand that the poet chosen for the occasion, Mr. James T. Fields, of Boston, would be prevented by severe domestic bereavement from performing the agreeable service for which he had prepared himself. The attendance was not as large as usual. Several honorary members were elected at the business meeting, at which it was voted to accede to the request of the Association of the Alumni of Harvard, made known by a letter from Hon. Edward Everett, to yield the use of the day following Commencement in alternate years to the Association. The exercises in the church were introduced by Prayer, by Rev. Dr. G. W. Blagden of Boston. The Rev. Dr. W. B. Sprague of Albany delivered an Oration on “The American Mind, its Origin and Destiny.” The Rev. John Pierpont of Medford had assented to the sudden call made upon him, by bringing with him a poem on Progress, which he had prepared for another occasion. This he kindly delivered, introducing it with four lines furnished to him *impromptu* by the Rev. William Newell. Hon. Robert C. Winthrop presided at the dinner in Harvard Hall, which was enlivened by brilliant speeches.

RELIGIOUS INTELLIGENCE.

Divinity School at Meadville, Penn. — The anniversary exercises of this flourishing School took place on Thursday, June 26. On the evening preceding, a discourse was to have been delivered before the graduating class by the Rev. Henry Ward Beecher, of Brooklyn, N. Y. Indisposition having precluded his discharge of that service, the Rev. James F. Clarke, who is residing at Meadville for the restoration of his health, most kindly and satisfactorily supplied the deficiency, and delivered a very earnest and powerful discourse on “The Positive Theology of Unitarians.” On Thursday morning, the Rev. Mr. Ball, of Upton, Mass., a former graduate of the School, gave an address in Divinity Hall before the Associated Alumni; his subject being “The Christian Thinker.”

In the afternoon, dissertations were read by the gentlemen whose names are attached to the respective titles, as follows:—Faith and Works; Paul and James, by Mr. William D. Andrews. Science and Religion, by Mr. Austin S. Dean. Holiness in a Minister, by Mr. Martin G. Dean. The Prophet Isaiah, by Mr. J. R. Hoag. Frederic of Saxony, by Mr. Gustavus V. Maxham. Christ, the Light of the World, by Mr. Thomas J. Mumford. Itinerant Ministry, by Mr. William D. Potts. President Stebbins then addressed the graduates with an affectionate tone of regard and sympathy, and with words of wise counsel, as he conferred the certificates which testified to their academic and moral preparation for their work.

We rejoice at the prosperity which smiles upon this vigorous seminary of the West. Our pulpits even in these regions have borne witness to the abilities which it has fostered and trained. It has received an impulse from the endowment which was so generally made in answer to the appeal of the Trustees. It is situated just where it can most effectually do its work. Preachers for the West must be trained at the West. The air beyond the mountains is good for the lungs and stomachs of those who have been born there, but does not seem to agree with Cambridge constitutions. The Rev. N. S. Folsom will now devote himself entirely to the full duties of a Professor, for which he has an aptitude, and in the discharge of which he has had high success. His place as pastor of the Independent Church at Meadville will be temporarily filled by the Rev. James F. Clarke.

Divinity School at Cambridge.—The Thirty-Fifth Annual Visitation of this department of Harvard University took place in the College Chapel on Tuesday, July 15. The graduating class numbered only five candidates for the ministry. The class which, according to the usual course, will graduate next July, now contains eleven members. The exercises opened with Prayer, by Professor Francis. Each of the young men who on this day completed their professional course then read a dissertation on the subjects following, three hymns being sung during the exercises:—The Theology of Sir Isaac Newton, by Adams Ayer, A. B. The Importance of the Poetry of the Bible to the Preacher, by Warren Handel Cudworth, A. B. The Ministry of Richard Baxter, by Thomas Dwight Howard, A. B. The Practical Object of the References to the Divine Purposes in the Epistles of Paul, by Charles Lowe, A. M. The Nature and Formation of Myths, by Horatio Stebbins, A. B. Concluding Prayer, by Professor Noyes. The exercises gave satisfaction to the company of friends and brethren assembled on the occasion, and indicated a faithful culture on the part of the pupils, aided by the devoted labors of the two Professors. The oration and services of the Story Association of the Law School, which were attended at the same time in the parish church, did not seem to draw away the interest which belonged for the day by precedent and vested right to the Theological School. Are there not days enough in the year to allow to each department of the University its own commemorative or festival observances, without a real or an apparent collision? It is hardly wise at this juncture for the representatives of the two professions to multiply the occasions of seeming variance between Law and Gospel.

The usual Discourse before the members of the graduating class in

the Theological School had been delivered on the Sunday evening preceding, by Rev. Chandler Robbins of Boston, from the words, — "For without me ye can do nothing."

After an excellent dinner provided by the College in Harvard Hall, for the guests and students, the Theological Alumni assembled for their Annual Meeting in the College Chapel, the Rev. Dr. Parkman in the chair. The officers of the Association were reelected. Rev. Dr. Lunt of Quincy was chosen by ballot as Second Preacher for the next year, the Rev. Dr. Putnam standing as First Preacher. The hour having arrived, religious exercises were performed, and a Discourse was delivered by Rev. Calvin Lincoln, Secretary of the American Unitarian Association. His subject was, *The Grounds and Value of Sympathy and Coöperation among Ministers.* Text, Romans xii. 5.

In the business meeting of the Association, a series of Resolutions was introduced by Rev. Dr. Gannett, and seconded by Rev. Dr. Hall of Providence, R. I., expressive of a hearty interest in the School, of satisfaction with its condition as regards the disposition of its students and the conscientious fidelity of its Professors, of a desire that more young men might avail themselves of its opportunities, and of a respectful suggestion that the official guardians and the personal friends of the institution would provide means for relieving the onerous labors of the two instructors by giving them the aid of another.

As to the question which is so often discussed in our fraternal circles, — the expediency of retaining the connection between the College and the Theological School, or of severing it and removing the latter from Cambridge, we find that opinions are about equally divided, and that the advantages and disadvantages of either course are supposed to be well balanced. If the connection is retained, the Corporation of the College cannot be expected to exhibit that amount of interest in the success of the School which they show for the efficiency of the Medical, the Law, and the Scientific departments of the University. While religious sectaries have not scrupled to misrepresent the facts of the case in this regard, the Corporation will probably be very cautious of affording any marked evidence of a denominational zeal.

If the connection between the College and the School is severed, the latter must lose the benefit of certain funds which were actually and literally given for its use, though technically committed to the President and Fellows of the College. The success of the School in its existing relation must depend upon the hearty interest and sympathy of its friends outside of the College. Our ministers must look to it as the nursery of their successors, and every minister of one of our congregations might cherish and do something to realize the wish, that at least one young man from his flock should become a student in that School. Cambridge has now a rival in Meadville. The relation between the two institutions is wholly amicable; not an act, not a word, not a feeling even, we are confident, has been done, uttered, or entertained, inconsistent with a spirit of perfect friendship for either or both of them. Reasons wholly independent of the relations of either seminary will guide students to one or the other of them. But Cambridge has advantages which ought to be improved. If another Professor, or even an instructor, could be secured, to relieve Drs. Noyes and Francis of some one department of instruction, three times the present number of

students might find there ample means for professional training. Why will not some warm friend of our School furnish the Corporation with funds for a permanent, or at least a temporary appointment?

We are desirous of making known to any who may be ignorant of them the privileges and opportunities which the School at Cambridge offers to such as have a love and fitness of heart and mind for the work of the Christian ministry. The free and catholic air of the Institution are in admirable harmony with the spirit and the need of this age. The rights of independent thought are respected. Devout and patient inquiry is made the chief condition for the discovery of truth. While at other seminaries authority and spiritual despotism set up limitations to overawe and prohibit honest questionings, the student here is advised that the field of truth has no fences, no spring-guns or pitfalls. Benevolence supplies means sufficient to lighten the burdens of a three years' toil, which is not rewarded by money, though for obvious reasons the School does not offer a bounty to allure any who might come to it with mixed motives. The sums granted annually to students who desire such aid are but trifling compared with the endowments of Fellowships in the English Universities, which are put to much the same uses. There is sufficient to afford to the most needy at Cambridge a sum which will cover the expense of room, of board, and of instruction, while if the merits of any individual students are equal to their wants, there never will be a lack of such further aid, and so bestowed, as may be received with all proper feelings.

If a candidate for admission to the School is not furnished with a college degree, he is required, besides bringing his letter of introduction and his certificate of good character, to pass such a literary and classical examination as will test his ability to improve the opportunities that are to be afforded him. He is not required at his entrance, no, nor even at his departure with the certificate of the School, to assent to any form of doctrinal belief or denominational policy. He is as free and unfettered, and, we will add, as unbiased in this respect, as is any individual on the face of the whole earth. So far as any express or exacted condition is involved, so far as any influence brought to bear on him is concerned, the graduate may go directly to a Calvinistic, Episcopal, Swedenborgian, or Roman Catholic Church, and offer himself as a minister at its altar. We rejoice in our very hearts, we devoutly thank God, that this is so. Never may it be otherwise. We shall always regard this condition of our own professional studies as having put into our hands the very keys and the torch most likely to guide us to the mysteries of truth.

We love to dwell on the remembrances of one of the lecture-rooms. The venerable Henry Ware is seated at the head of the table, his pupils are seated around it. He has before him a writing-book, each page of which, under the title of some subject in dogmatic or systematic theology, bears a list of the leading works and authorities which have advocated the various views and opinions of the great sects. He announces the topic which we are to investigate for our next exercise,—be it a question of the Trinity, of the Vicarious Atonement, of the Papacy, or of Episcopacy. He refers us to the great champions of the respective doctrines or theories. He requires us to read and master their arguments, to learn all that can be said on their side, to do full justice to them, either by adopting them if sustained, or by pronouncing

where we find them unsatisfactory. Instead of instilling into us some opinion of his own, he allows all the great lights or leaders of Christendom to have their full power over us, and permits them to say all that they can say for themselves. And when we come together to give the results of our investigations, our venerable friend, the very impersonation of candor, listens attentively to see if we do justice to our authors, and if their case might have been put stronger than they have stated it, Dr. Ware will make it up to them. And so was it under the instructions of another, an honored, beloved, and faithful Professor, who still lives, though not to do the work which he did so well. With him we read in Hebrew and in Greek the original words of the sacred oracles, not to verify preconceived opinions, nor to justify foregone conclusions, forced upon us by a creed of man's device, but to learn and understand what is written, to discover what are the doctrines, truths, lessons, and aims of the Bible. If any one can devise a method of instruction more free from the risks of uncharitableness, bigotry, and error than this, or more likely to lead to the simple truth, we should be glad to have the method indicated. It is to be remembered, too, that the text-books used in the School are, with most inconsiderable exceptions, the works of men who were neither Unitarians nor Congregationalists. Yet it is from these and the Bible that we are expected to discover the truth. How different is the liberality of our brotherhood in this respect from the jealousy and timidity of some other denominations! The theological seminary of one of the large denominations in this country forbids by its rules the admission of any *heretical* book into its library. What better evidence could it give of its own heretical character, and of its dread of the light?

We believe that the liberal influences of the School at Cambridge are in perfect harmony with the spirit which now moves the hearts of many of the wisest and best persons in Christendom. Let them be liberally dispensed, and let them be valued as they should be, for they have been purchased to the world at a heavy cost.

It is possible that a reconsideration of the question by the Corporation may result in severing the School from their jurisdiction, and in its removal from Cambridge; allowing it at its departure all the funds which, by the intent of the donors, were designed for the support of a theological institution on the most liberal Protestant basis. We have our doubts whether this would result in unqualified good, though we freely confess that, under the existing arrangements, the School suffers by the anomalous and constrained relation which it bears to a so-called State University. If by any happy contingency the State should be led to define its own relations to the College, we may hope that another matter will be decided with that. When the Corporation accepted funds from Unitarians, given to endow a liberal school of theology, the contract supposed a right on the part of the Corporation to receive money for such uses, and at the same time encouraged an expectation that the funds would be made as effective as possible. There is an undeniable perplexity in the present position of the parties to the contract, but there is also wisdom enough to deal judiciously with it.